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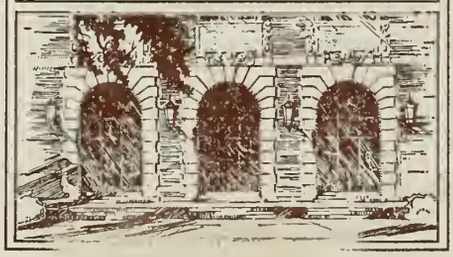

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF
FEB. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters ot key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

USDA-SCS PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WASHINGTON, D C

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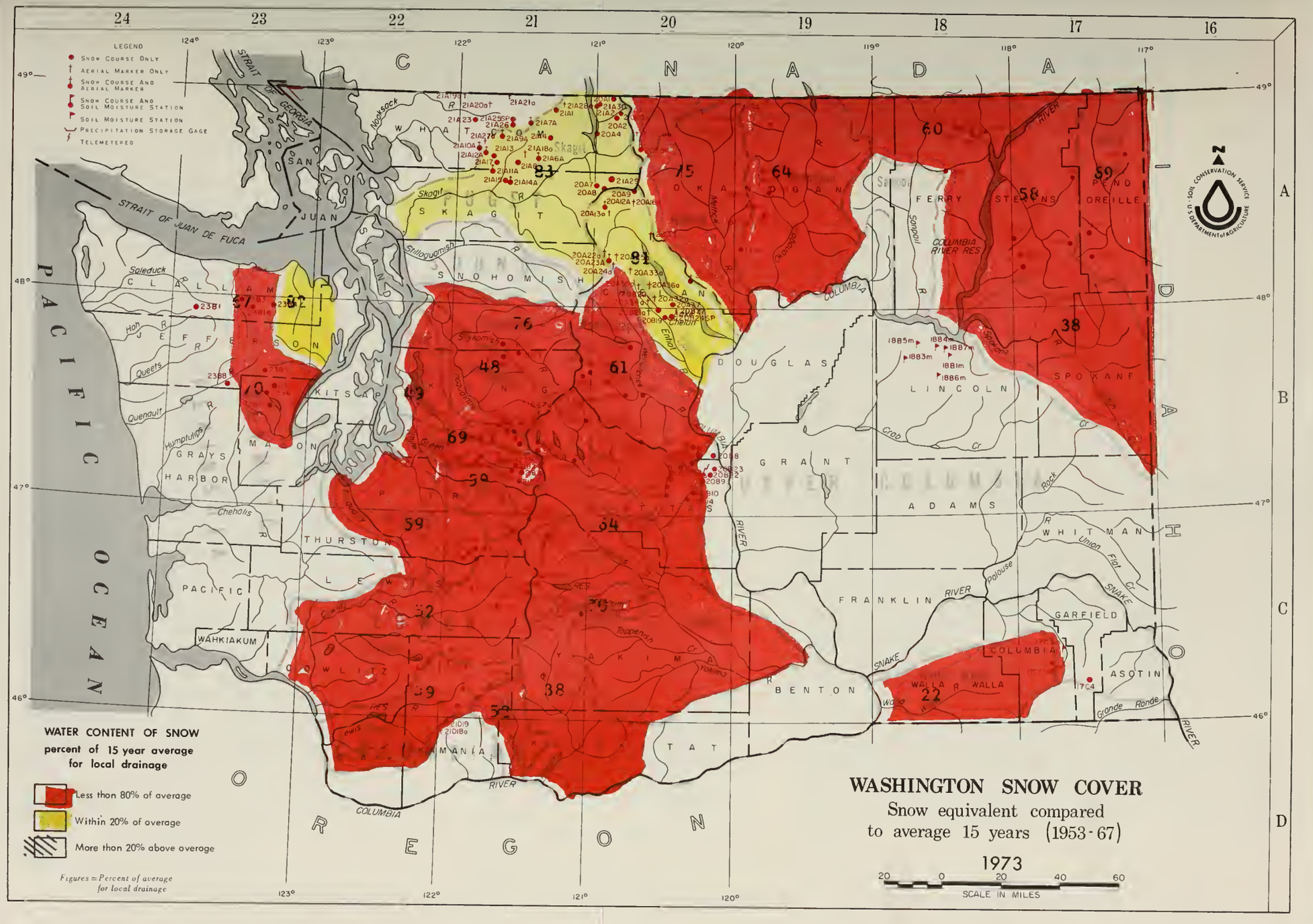
WASHINGTON SNOW COVER
Snow equivalent compared to average 15 years (1953-67)
1973
SCALE IN MILES
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
WATER CONTENT OF SNOW
percent of 15 year average for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
CANADA
PACIFIC OCEAN
OREGON
IDAHO
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
THURSTON
PACIFIC
LEWIS
WAHKIAKUM
COWLITZ
KLICKITAT
YAKIMA
BENTON
FRANKLIN
GRANT
ADAMS
DOUGLAS
LINCOLN
OKANOGAN
FERRY
STEVENS
PEND OREILLE
SPOKANE
WHITMAN
GARFIELD
ASOTIN
COLUMBIA
WALLA WALLA
COLUMBIA RIVER RES
SNAKE RIVER
COLUMBIA RIVER

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	1BA3	28	39N	35E	4070
Cabin Creek	1BA8	5	3BN	36E	3170
Goat Creek	1BA4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	28B5
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	3BN	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	1BE	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	2082	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20822	11	20N	20E	5300
Colockum Creek Lower	20823	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	2084	18	21N	20E	3400
Stemilt Creek					
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	2087PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	1881m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	1884m	21	27N	33E	2420
Sheffels	1885m	17	27N	32E	2378
Sherman	1887m	24	27N	33E	2440
Wheatridge	1886m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	2189	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	2089	25	20N	20E	5370
Cooke Creek	20810	17	19N	20E	4123
Domery Flat	21844m	15	20N	14E	2200
Fish Lake	2184	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20811	29	21N	19E	5385
High Creek	20812	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21814M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20813	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	2188	13	21N	11E	2450
Van Epps Pass	20826a	16	23N	15E	5925
Walters Flat	20815	22	20N	19E	3360
Waptus Lake	21849a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	BE	4B00
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	BN	5E	3200
New Muddy River	22C6	36	BN	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2B70
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21825	27	21N	8E	1200
Cougar Mountain	21842SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21831	5	19N	11E	4700
Snowshoe Butte	21843SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21817	11	21N	9E	2400
South Fork Cedar	2186	24	21N	10E	3000
Tinkham Creek	21820	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21818	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A2Ba	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	B00
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5B00
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	BE	1600
Three Mile Creek	21A15	1B	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

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WATER SUPPLY OUTLOOK

State of Washington
February 1, 1973

* *
* The water supply outlook for irrigation and power in Washington is *
* poor for this time of year. Measurements of snow cover as of the *
* first of the month indicate the snow pack to range from 78% below *
* normal for Mill Creek in the Lower Columbia to 17% below for the *
* Skagit River in the northwest corner. A recent storm occurred in *
* the north central part of the state that could have improved this *
* outlook somewhat, but still more snow is needed in all portions of *
* the state if anywhere near normal runoff is to occur this spring. *
* The soil mantle beneath the snow pack is slightly deficient in *
* moisture primarily due to the lack of precipitation during the *
* late fall months. Although September had above normal rainfall *
* over the whole state, October and November were very deficient. *
* A bright spot occurred during December when generally above normal *
* rainfall occurred, but this again was followed by large deficits *
* in January. Reservoir storage is good, primarily due to an excel- *
* lent carry over from last year's surplus water supply. *
* *

SNOW COVER

None of the water sheds in the Upper Columbia Basin have snow packs that closely approach normal, with only one indicating snow cover to be in the 80 to 120% range. Generally speaking, the snow packs this year are the worst for this time of year that we have seen for over ten years. In recent history, in 1963, snow packs were almost as deficient as of February 1 as they are today. In the Upper Columbia Drainage, the Spokane River water shed has the least snow; 32% of last year, 37% of 1971 and 38% of average. The Chelan-Entiat water sheds are the best with the Chelan having a snow cover as of February 1 of 55% of last year, 68% of 1971 and 81% of normal. Along the Lower Columbia, the situation is very grave. Mill Creek, as measured by only two snow courses, has a snow pack that is 78% below normal. The situation improves to the west, but only slightly. The White Salmon River drainage has a snow pack that is 48% below normal. The Puget Sound Drainage generally improves from south to north with a deficient pocket in the Green-Snoqualmie areas. Skagit, having the best snow cover in the state as of February 1, was 43% of last year at this time, 47% of the previous year and 83% of normal. On the Olympic Peninsula, the snow pack is 49% of last year and 73% of average.

RESERVOIRS

In spite of this poor water supply outlook in the snow field, the reservoirs have good amounts of water in storage as of February 1. Most have greater than normal amounts for this time of year. Subsequent precipitation, in the form of snow at higher elevations and rainfall in the valleys, will determine how and if these reservoirs will fill with the spring runoff. Even with expected inflows, there is a possibility of all the irrigation reservoirs not filling.

PRECIPITATION

As reported by the National Weather Service, fall precipitation in the Canadian portion of the basin was 7% greater than normal, but winter precipitation to date has been only 75%. In the Pend Oreille-Spokane drainage, fall precipitation was 31% below normal and to date this winter, 16% below. Along the eastern boundary of Washington, fall precipitation was generally 10% below normal and 15% so far this winter - in the central area, 25% and 20% for the fall and winter periods. West of the Cascades, precipitation has been fairly consistent at 15% below normal.

STREAMFLOW

In spite of the below normal precipitation, river flows during January were above normal on the Columbia River at Birchbank, The Dalles and the Yakima River at Keona. The rest of the streams were slightly below normal, ranging down to the Okanogan, as measured at Tonasket, at 48% below normal. Forecasts of streamflows will not be made until the March 1 Water Supply Outlook.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about February 1, 1973, as percent of the same date in 1972 and 1971 and average of record.

Tributary Basin	No. of Courses Average	1973 Snow Water Expressed as percent of 1972	1971	1953-67 Avg.
		UPPER COLUMBIA BASIN		
Pend Oreille	7 - 10	58	56	69
Kettle	12 - 14	53	53	60
Colville	5	56	48	58
Spokane	2 - 3	32	37	38
Okanogan	26 - 32	42	50	64
Methow	8 - 9	47	52	75
Chelan	8 - 10	55	68	81
Entiat	1 - 8	55	54	79
Wenatchee	8 - 9	33	40	61
Yakima	18 - 22	32	39	64
Ahtanum	1	37	45	70
		LOWER COLUMBIA		
Mill Creek	2	8	16	22
Klickitat	1	22	19	38
White Salmon	2	26	28	52
Lewis	17 - 18	23	25	49
Cowlitz	10	26	30	52
		PUGET SOUND		
Nisqually	4	29	34	59
White	1	43	43	69
Green	5 - 10	22	28	49
Snoqualmie	1	24	30	48
Skykomish	1 - 2	43	48	76
Skagit	6 - 15	43	47	83
Nooksack	1	50	49	-
		OLYMPIC PENINSULA		
Skokomish	4	50	47	70
Elwha	1	44	49	67
Dungeness	1	54	61	82

RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (February) 1973	1972	1971	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	153.3	147.3	202.5	137.0
Columbia	Franklin D. Roosevelt Lake	5232.0	4937.1	4420.2	5065.6	3812.5
Columbia	Banks Lake	761.8	610.7	714.9	712.2	494.0
Okanogan	Conconully Reservoir	13.0	10.8	9.1	5.3	5.6
Okanogan	Salmon Lake	10.5	9.5	8.6	2.1	8.6
Chelan	Lake Chelan	676.1	237.1	190.4	216.3	318.4
		YAKIMA				
Yakima	Keechelus Lake	157.8	98.6	137.2	97.3	92.1
Kaches	Kachess Lake	239.0	193.0	156.5	175.3	172.2
Cle Elum	Lake Cle Elum	436.9	315.9	277.1	170.1	241.1
Bumping	Bumping Lake	33.7	6.7	5.0	5.3	9.9
Tieton	Rimrock Lake	198.0	143.1	146.7	86.2	111.3
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	997.3	822.1	895.4	956.3
Skagit	Diablo Reservoir	90.6	83.4	83.9	84.4	85.6
Skagit	Gorge Reservoir	9.8	8.2	7.8	7.9	-

1/ Based on Active Storage

* 15-year average 1953-67

RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (February) 1973	1972	1971	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	153.3	147.3	202.5	137.0
Columbia	Franklin D. Roosevelt Lake	5232.0	4937.1	4420.2	5065.6	3812.5
Columbia	Banks Lake	761.8	610.7	714.9	712.2	494.0
Okanogan	Conconully Reservoir	13.0	10.8	9.1	5.3	5.6
Okanogan	Salmon Lake	10.5	9.5	8.6	2.1	8.6
Chelan	Lake Chelan	676.1	237.1	190.4	216.3	318.4
		YAKIMA				
Yakima	Keechelus Lake	157.8	98.6	137.2	97.3	92.1
Kaches	Kachess Lake	239.0	193.0	156.5	175.3	172.2
Cle Elum	Lake Cle Elum	436.9	315.9	277.1	170.1	241.1
Bumping	Bumping Lake	33.7	6.7	5.0	5.3	9.9
Tieton	Rimrock Lake	198.0	143.1	146.7	86.2	111.3
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	997.3	822.1	895.4	956.3
Skagit	Diablo Reservoir	90.6	83.4	83.9	84.4	85.6
Skagit	Gorge Reservoir	9.8	8.2	7.8	7.9	-

1/ Based on Active Storage

* 15-year average 1953-67

SOIL MOISTURE - FEBRUARY

rainage Basin nd tation	Number	Elev.	Profile Depth	(Inches): Total : Capacity:	Soil Moisture Content (Inches) as of Feb. 1 1973	1972	1971
RAB CREEK							
ack Woods	18B3m	2750	48	13.6	7.7	8.0	8.9
rause	18B4m	2420	48	13.6	7.0	5.6	4.9
neffels	18B5m	2380	48	13.6	7.9	7.7	5.7
nerman	18B7m	2440	48	13.6	6.7	6.4	5.5
neatridge	18B6m	2290	48	13.6	6.2	8.1	8.9
KANOGAN							
almon Meadows	19A2M	4500	48	5.4	2.4	3.6	2.6
rout Creek	3-M	2600	48	7.3	3.4	4.0	3.3
AKIMA							
omery Flat	21B20m	2200	48	6.9	6.6	--	4.9
ake Cle Elum	21B14M	2200	48	12.8	6.9	--	9.2
ALLA WALLA							
ouse	17C3m	3650	48	11.1	7.3	10.5	10.6
elmers	17C2M	4400	48	12.0	10.7	10.6	10.9
ENATCHEE							
oper Wheeler	20B7M	4400	48	12.7	8.9	9.0	10.3

FALL SOIL MOISTURE

rainage Basin nd ation	Number	Elev.	Profile Depth	(Inches): Total : Capacity:	Soil Moisture Content (Inches) as of Oct. 1 1972	1971	1970
AB CREEK							
ck Woods	18B3m	2750	48	13.6	5.6	5.3	7.0
rause	18B4m	2420	48	13.6	6.2	5.0	4.4
neffels	18B5m	2380	48	13.6	6.5	5.3	4.4
nerman	18B7m	2440	48	13.6	4.6	4.0	3.8
neatridge	18B6m	2290	48	13.6	6.2	5.5	7.8
ANOGAN							
almon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7
rout Creek	3-M	3600	48	7.3	3.3	3.3	3.4*
AKIMA							
omery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4
ake Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6
ALLA WALLA							
ouse	17C3m	3650	48	11.1	6.0	6.2	5.9
elmers	17C2M	4400	48	12.0	7.7	8.2	7.3
NATCHEE							
oper Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1

* November 1 measurement

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct Average	FALL 1972 2/ Departure	WINTER Nov-Dec 1972 Average	WINTER Jan 1973 2/ Departure
Columbia in Canada	4.15	+0.26	6.76	-2.30
Pend Oreille -Spokane	2.68	-1.20	10.50	-1.97
Northeastern Washington	2.16	-0.09	6.34	-1.40
Southeastern Washington	2.35	-0.30	7.40	-1.02
Central Washington	3.48	-0.96	17.67	-2.02
North Central Washington	1.04	-0.37	3.09	-1.49
Northwest Slope Cascades	10.41	-1.26	29.92	-5.71
Southwest Slope Cascades	6.56	-1.16	24.01	-4.14

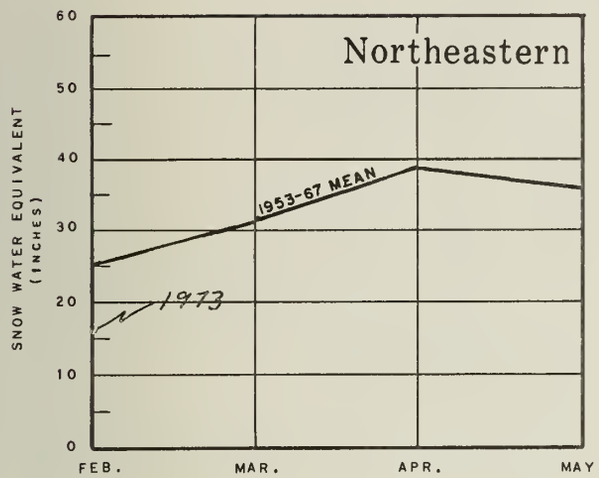
Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse drainages.
Central Washington	- Yakima, Wenatchee and Chelan drainages.
North Central Washington	- Methow and Okanogan drainages.
Northwest Slope Cascades	- Puget Sound drainages.
Southwest Slope Cascades	- Lower Columbia drainages.

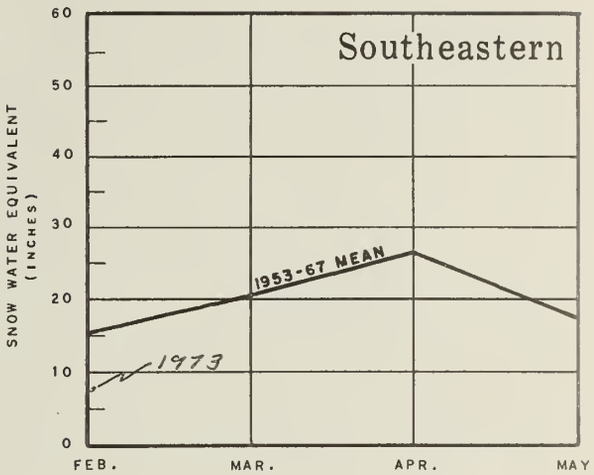
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

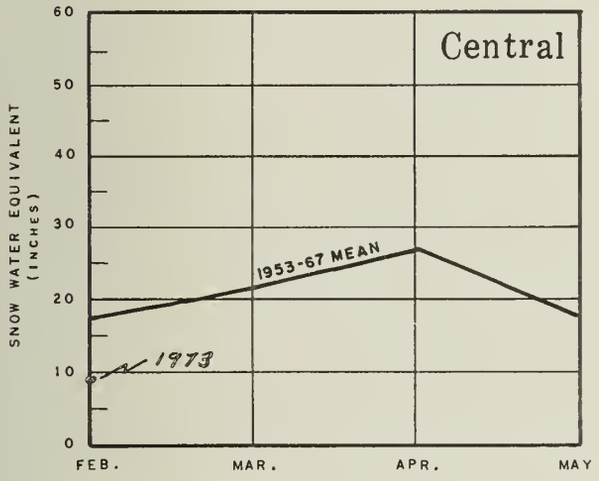
2/ - Departure from 15-year (1953-67) drainage division average.

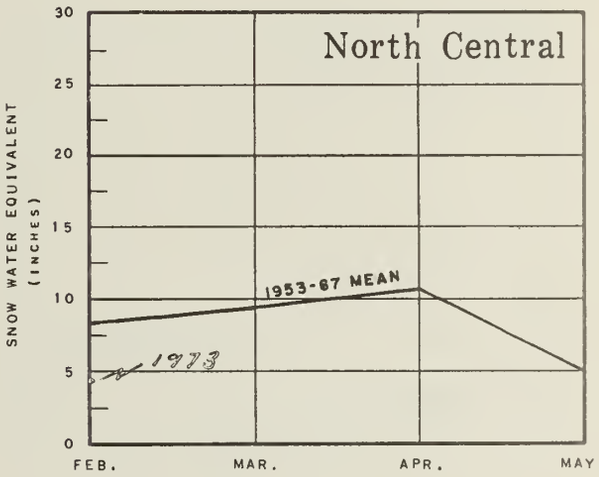
WASHINGTON SNOW COVER

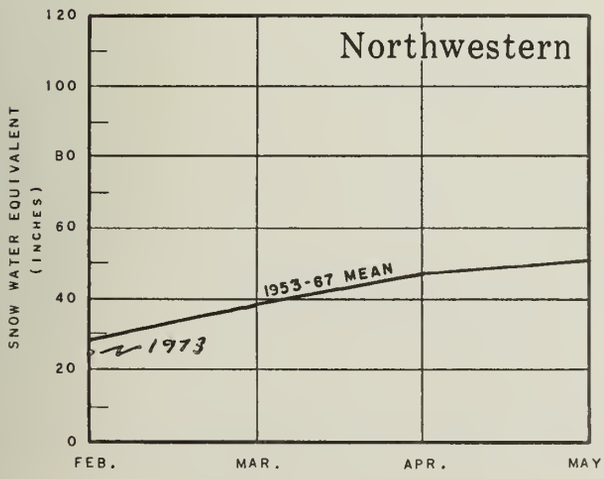
DRAINAGE AREAS

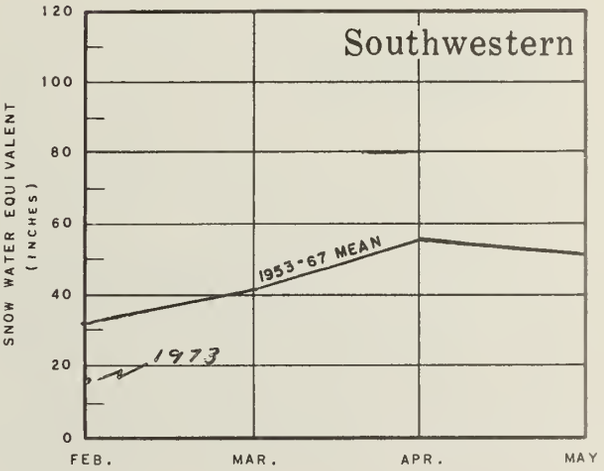










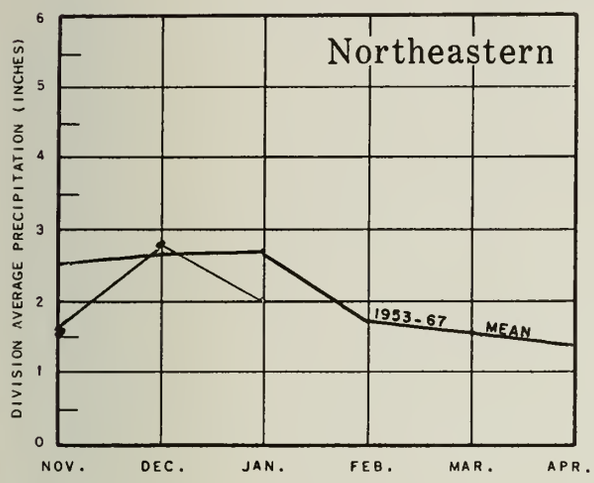


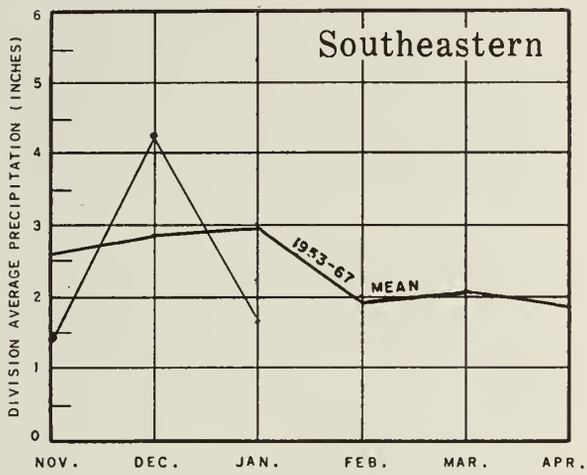
Selected Snow Survey Courses by Soil Conservation Service

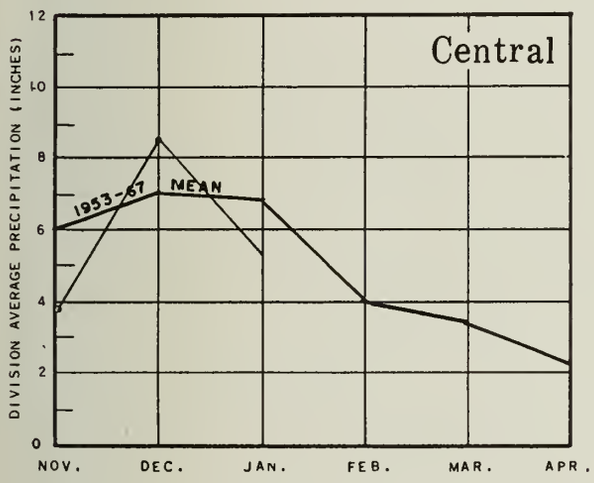
WASHINGTON VALLEY PRECIPITATION

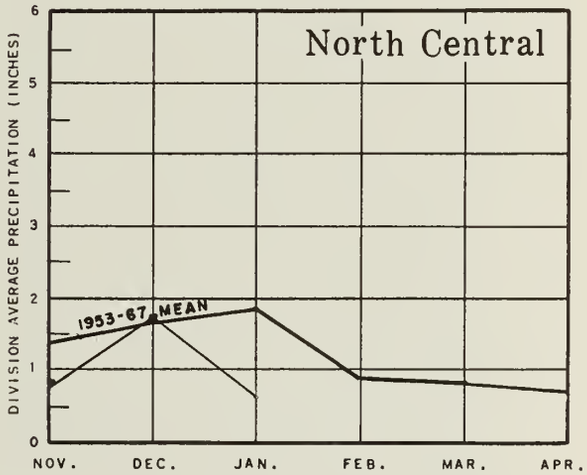
1972-1973

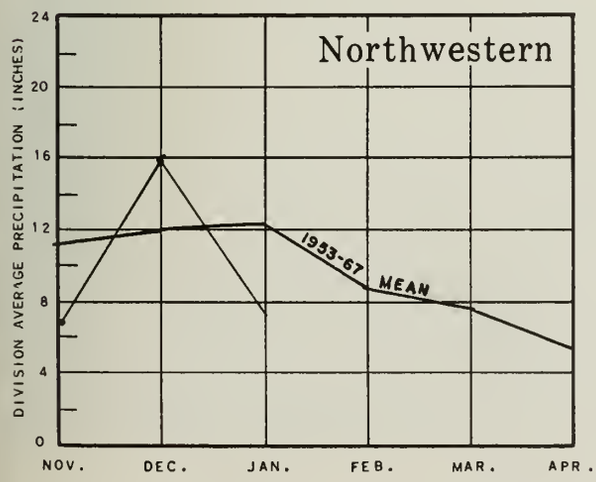
DRAINAGE AREAS

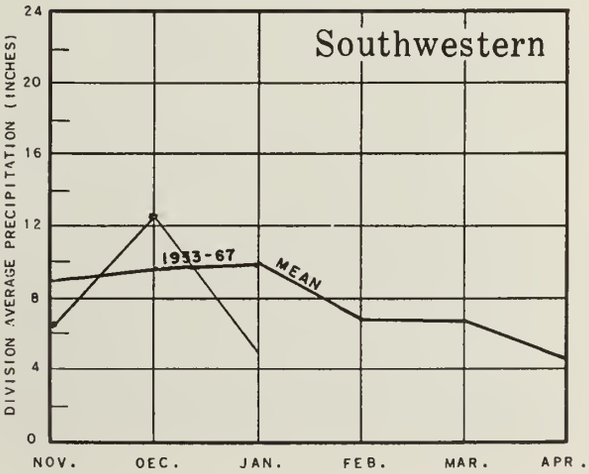












Preliminary Analysis by National Weather Service

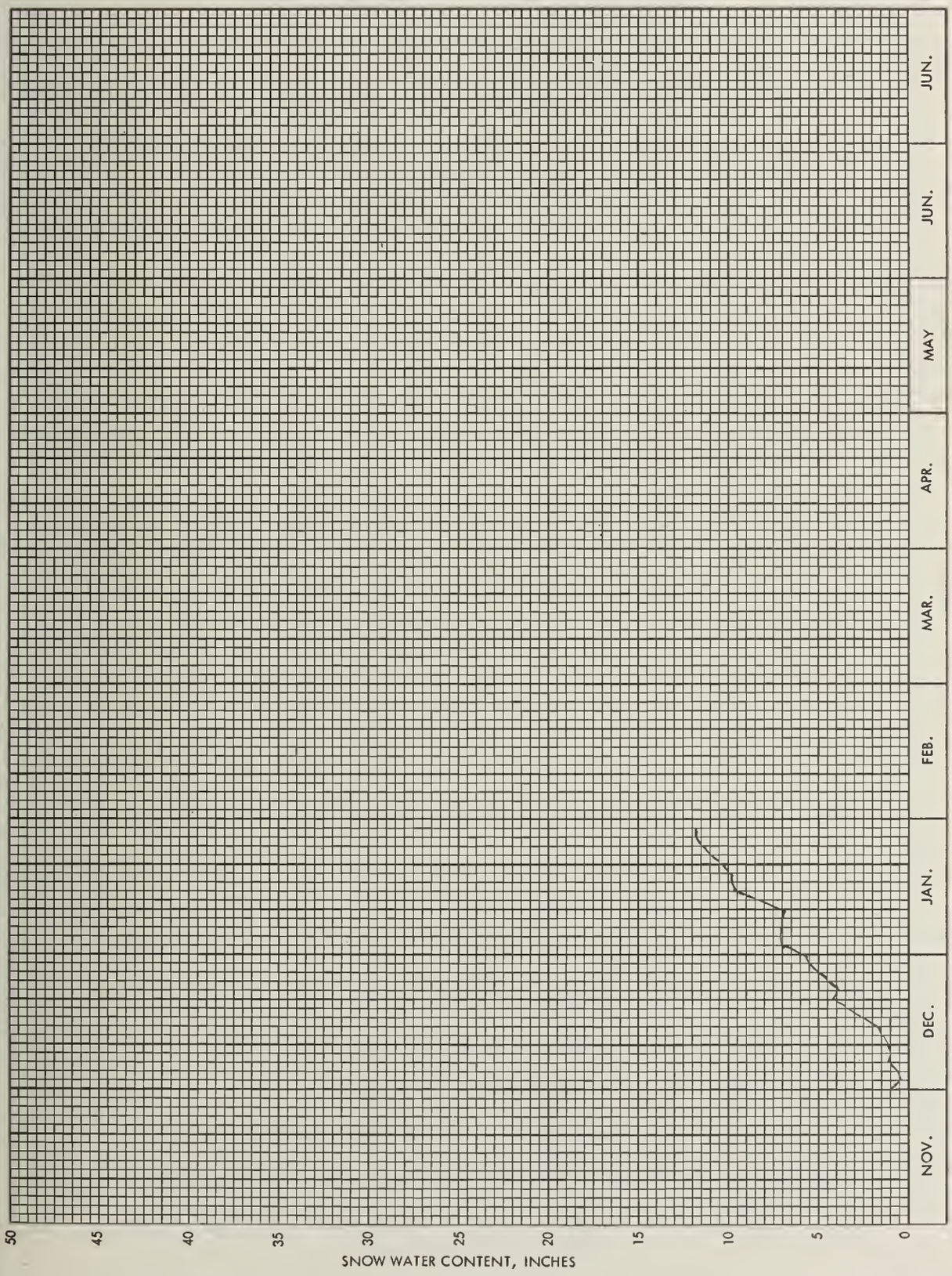
SNOW PILLOW DATA

Berne-Mill Creek

1972-73

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42' Elev. 3240



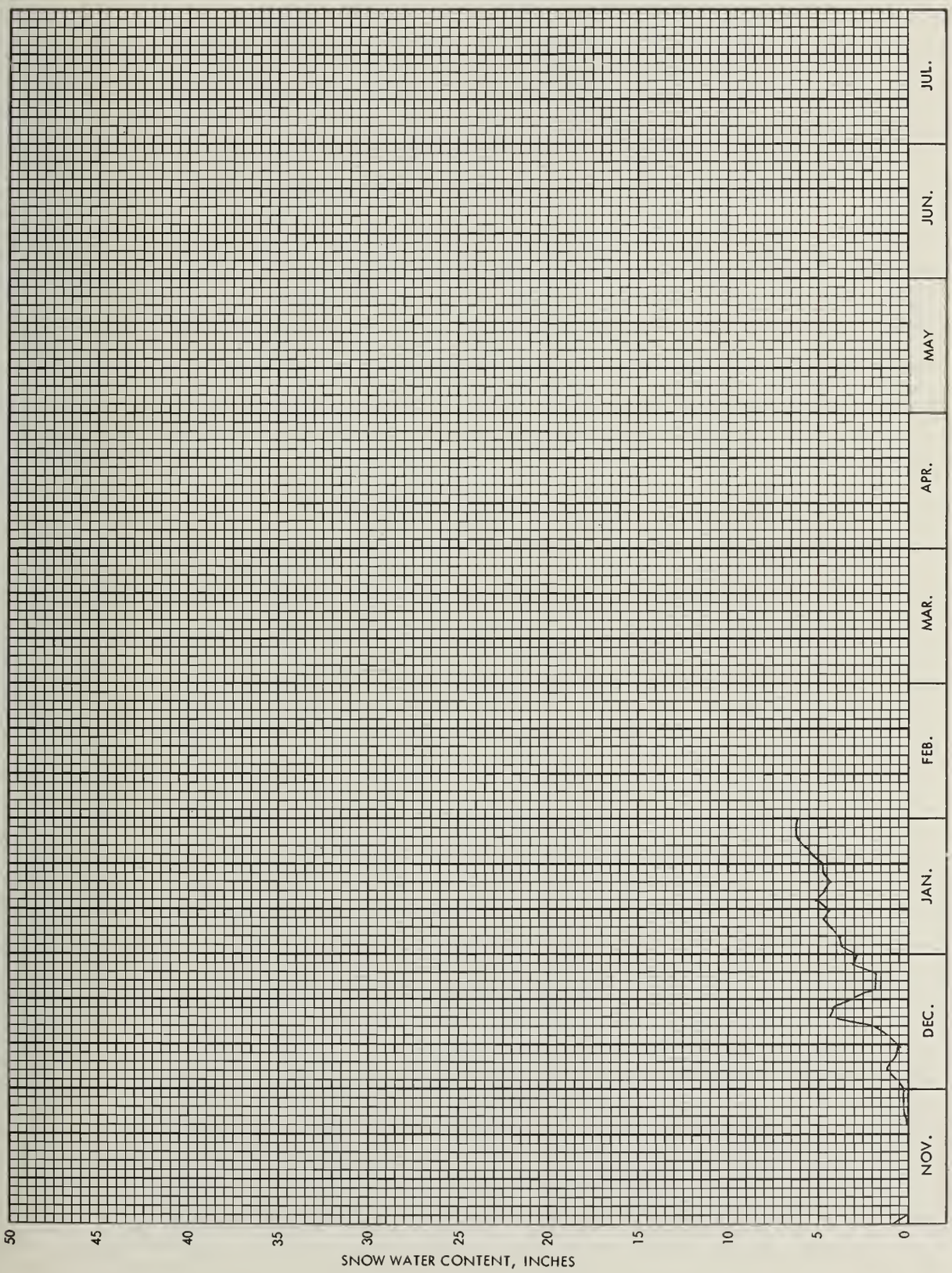
SNOW PILLOW DATA

Cougar Mountain - FS

1972 - 1973

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 121° 40' Elev. 3200'



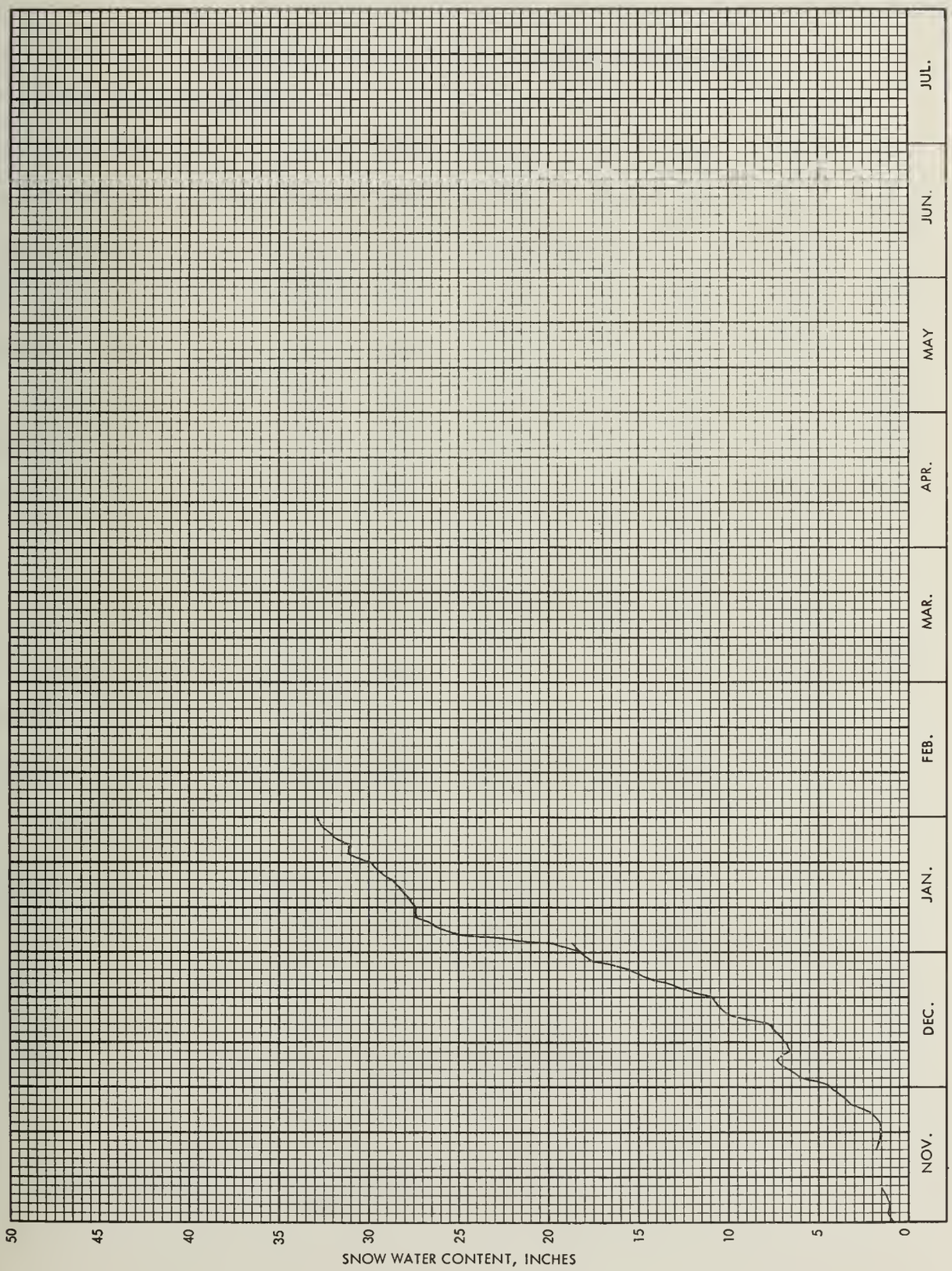
SNOW PILLOW DATA

Snowshoe butte - FS

1972 - 1973

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Long. 121° 22' Elev. 5000'



WSFB-X4-L

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Benton Meadow	16A02	2344	12/27	0	0.0	3.8	3.2
			1/30	13	1.8	5.0	5.1
Benton Spring	16A03	4900	12/27	24	5.8	11.1	8.6
			1/31	38	11.5	18.0	14.0
Boyer Mountain	17A02	5250	Not Measured			14.4	-
Chewelah	17A04	4925	1/27	35	9.0	11.0	13.2
Heart Lake Trail	14C10	4800	1/3	19	3.8	15.2	-
			1/30	28	7.2	29.6	-
Hoodoo Basin	15C10	6000	1/3	65	18.1	28.5	19.8
			1/30	85	28.8	52.2	-
Hoodoo Creek	15C01	5900	1/3	64	17.1	27.5	18.0
			1/30	81	26.4	51.5	32.0
Lookout	15B02	5250	12/29	42	10.5	19.4	15.7
			1/31	53	16.7	39.3	25.0
Nelson	19-Canada	3050	10/31	8	0.9	-	-
			11/14	3	0.8	2.7	-
			11/29	10	1.6	-	-
			12/14	11	1.8	5.0	-
			12/29	19	4.6	10.2	-
			1/12	27	6.0	13.7	-
			1/31	36	9.6	15.0	11.4*
Schweitzer Bowl	16A06	4500	12/27	44	9.7	18.8	-
			1/30	61	17.2	28.8	-
Schweitzer Ridge	16A05	6100	12/27	58	15.3	26.7	-
			1/30	83	26.3	40.0	-
Winchester Creek	17A03	2970	1/26	21	6.0	9.2	9.2
KETTLE RIVER							
Barnes Creek	90-Canada	5300	1/30	43	10.8	19.2	-
Big White Mtn	154-Canada	5500	1/30	39	15.4	15.4	-
Boulder Road	18A02	1450	12/27	0	0.0	3.4	2.1
			1/29	6	1.1	4.3	4.1
Butte Creek	18A03	4070	12/27	17	3.0	3.9	4.3
			1/29	26	5.4	8.4	6.6
Cabin Creek	18A08	3170	12/27	0	0.0	4.3	4.2
			1/29	18	3.7	7.2	6.0
Carmi	126-Canada	4100	1/30	14	2.2	7.6	5.6*

\# Average based on 1953-67 average
* Average for years of record

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
KETTLE RIVER (Cont.)							
Farron # 1	17-Canada	4000	1/30	32	8.0	11.6	9.7*
Farron # 2	243-Canada	4000	1/30	33	7.8	New Course	
Goat Creek	18A04	3595	12/27	12	2.1	3.6	3.7
			1/29	20	4.0	7.0	5.5
Graystoke Lake	5-Canada	5950	1/27	40	11.7	-	-
Monashee Pass	48A-Canada	4500	12/28	48	6.0	9.3	
			1/30	33	8.3	13.8	9.8*
Old Glory Mountain	42-Canada	7000	1/29	66	19.5	20.5	18.7*
Snow Caps Creek	18A05	2150	12/27	0	0.0	3.5	2.3
			1/29	8	1.5	5.0	4.3
Snow Caps Trail	18A06	2720	12/27	0	0.0	4.1	3.0
			1/29	13	2.1	6.9	4.9
Summit G. S.	18A07	4600	12/27	15	2.7	-	4.3
			1/29	23	4.7	-	6.7
Trapping Creek Lower	166-Can	3050	1/30	11	1.2	6.8	4.8*
Trapping Creek Upper	165-Can	4450	1/30	25	6.0	9.8	7.6*
COLVILLE RIVER							
Baird	17A6	3215	1/28	20	4.4	7.2	5.9
Carlson	18A9	2885	1/27	7	1.0	3.7	4.3
Chewelah	17A4	4925	1/27	35	9.0	11.0	13.2
Stranger Mountain	17A5	4990	1/27	29	7.1	10.2	9.8
Togo	18A10	3370	1/27	17	4.3	10.8	8.6
SPOKANE RIVER							
4Th of July Summit	16B3	3100	12/29	0	0.0	9.8	3.5
			1/30	7	0.6	12.2	6.4
Sherwin	16C1	3200	12/22	6	1.3	11.4	-
			1/30	15	4.4	18.1	10.4
Lookout	15B02	5250	12/29	42	10.5	19.4	15.7
			1/31	53	16.7	39.3	25.0
Above Burke	15B8	4100	1/31	30	9.0	18.6	-
Copper Ridge	16B2	4800	1/30	30	9.2	-	-
OKANOGAN RIVER							
Aberdeen Lake	6-Canada	4300	2/1	16	3.3	6.6	5.1*
Blackwall Peak	100-Canada	6250	12/29	64	15.4	21.2	-
			2/1	61	19.7	39.4	25.7*
Bouleau Lake	234-Canada	4580	12/31	31	4.8	13.8	-
			1/28	34	3.3	15.6	-
Brenda Mine	193-Canada	4800	1/26	29	7.7	15.2	10.5*

Average based on 1953-67 average
* Average for years of record

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Brookmere	27-Canada	3200	1/29	17	2.9	9.6	7.3*
Carrs Landing Lower	167-Can	2250	12/30	2	0.2	3.4	-
			1/28	0	0.0	4.8	2.6*
Carrs Landing Upper	168-Can	3200	12/30	3	0.3	4.4	-
			1/28	7	1.1	5.4	4.3*
Clark +	19A8a	7000	Not Measured			-	-
Enderby	130-Can	4300	1/29	75	23.6	29.1	24.8*
Esperon Creek Lower	164-Can	4400	1/28	25	6.2	-	-
Esperon Creek Middle	163-Can	4700	1/28	34	6.9	-	-
Esperon Creek Upper	162-Can	5400	1/28	31	7.8	-	-
Freezeout Meadows New	20A38	5000	1/28	61	17.4	New Course	
Graystoke Lake	5-Can	5950	1/27	40	11.7	-	-
Hamilton Hill	107-Can	4900	Late Report				10.6*
Harts Pass	20A05A	6500	1/28	89	25.9	44.3	28.2
Horseshoe Basin +	19A05a	7000	1/30	30	8.1	19.1	9.7
Isontok Lake	152-Can	6300	12/28	16	3.0	7.7	-
			1/27	18	4.0	12.1	6.5*
Lost Horse Mtn	105-Can	6300	1/30	22	4.8	13.2	6.9*
Loup Loup	19A07	4650	1/31	24	5.2	10.9	6.6
McCulloch	4-Can	4200	12/28	14	2.2	5.0	-
Missizula Mtn.	106-Can	5100	Late Report				6.5*
Mission Creek	5A-Can	6000	12/28	38	7.8	13.4	-
			1/29	37	10.3	18.3	13.8*
Monahsee Pass	48A-Can	4500	12/28	48	6.0	9.3	-
			1/30	33	8.3	13.8	9.8*
Mount Kobau	156-Can	5950	2/1	22	5.0	13.3	11.5*
Muckamuck +	19A09a	6390	Not Measured			-	-
Mutton Creek No. 1	19A01	5700	1/29	31	7.4	18.7	9.7
Mutton Creek No. 2	19A04	6000	1/29	29	7.4	16.7	10.1
Mutton Creek No. 2SP	19A11SP	6000	1/29	-	5.2	New Installation	
New Copper Mtn.	46A-Can	4300	1/25	13	2.0	10.9	5.7*
New Penticton Res. #2	183-Can	5225	1/28	19	2.8	10.6	-
Oyama Lake	203-Can	4400	1/29	18	4.3	7.6	6.1*
Paysayten +	20A28a	4300	1/30	30	9.0	-	11.6
Postill Lake	55-Can	4500	1/30	20	4.1	8.5	10.0*
Rusty Creek	19A03	4000	1/30	16	3.2	8.0	5.6
Salmon Meadows	19A02	4500	1/29	23	4.6	12.1	7.3
Silver Star Mountain	99-Can	6050	1/2	50	13.0	19.8	-
			1/28	51	15.3	27.5	19.0*
Starvation Mountain +	19A10a	6750	Not Measured			-	-
Summerland Reservoir	3A-Can	4200	12/29	15	2.8	7.8	-
			1/28	20	4.5	12.1	8.1*

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

SOIL-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 4

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Touts Coulee	19A06	2845	1/30	5	1.0	5.4	3.1
Trout Creek	3-Can	4700	1/26	19	3.5	11.5	5.2*
Vaseux Creek	233-Can	4600	12/29	12	1.8	3.9	-
						8.2	-
White Rocks Mtn.	70-Can	6000	1/30	43	12.2	21.8	-
Dollar Watch +	20A29a	7000	1/30	54	14.6	24.8	18.4
Harts Pass	20A05A	6500	1/28	89	25.9	44.3	28.2
Horseshoe Basin +	19A05A	7000	1/30	30	8.1	19.1	9.7
Loup Loup	19A07	4650	1/31	24	5.2	10.9	6.6
Mutton Creek No. 1	19A01	5700	1/29	31	7.4	18.7	9.7
Mutton Creek No. 2	19A04	6000	1/29	29	7.4	16.7	10.1
Rusty Creek	19A03	4000	1/30	16	3.2	8.0	5.6
Salmon Meadows	19A02	4500	1/29	23	4.6	12.1	7.3
War Creek Pass +	20A31a	6500	1/30	84	23.5	41.2	-
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	1/30	74	22.2	40.3	29.4
Greenwood Flat +	20A25a	3540	1/30	51	15.3	-	21.6
Little Meadows +	20A24a	5275	1/30	74	22.2	38.9	29.9
Lyman Lake +	20A23A	5900	1/30	130	39.0	-	38.9
Park Creek Flat +	20A13a	2220	1/30	65	19.5	35.0	27.8
Park Creek Ridge	20A12A	4600	1/30	95	28.5	61.0	35.3
Petersons +	20A16a	3730	1/30	72	21.6	39.6	26.2
Rainy Pass	20A09	3730	1/27	88	26.0	43.8	27.5
Safety Harbor +	20A30A	6300	1/30	57	15.4	29.7	-
War Creek Pass +	20A31a	6500	1/30	84	23.5	41.2	-
ENTIAT RIVER							
Blue Creek G. S.	20B28a	4800	1/29	78	24.5	New Aerial	
Entiat Meadows +	20A33a	4800	1/29	84	26.4	48.3	-
Entiat River Trail +	20A34a	3150	1/29	34	9.9	26.7	-
Four Mile Ridge +	20B27a	7000	1/29	64	20.1	34.6	-
Fox Camp +	20A36a	6510	1/29	104	32.6	49.6	-
Pope Ridge	20B20	4300	1/30	39	11.5	22.7	14.5
Pugh Ridge	20A32a	6400	1/29	73	22.9	37.2	-
Shady Pass	20A37	6200	1/31	59	18.5	-	-
Snow Brushy +	20A35a	3850	1/29	73	22.9	34.7	-
Tommy Creek +	20B21a	5300	1/29	46	14.4	29.3	-

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER							
Berne-Mill Creek	21B23	2925	11/29	7	1.4	4.9	4.8
			12/14	15	2.3	13.8	7.3
			12/27	23	6.9	16.7	11.4
			1/15	38	11.8	28.1	17.1
			1/29	46	13.9	36.2	20.7
Berne-Mill Creek New	21B41SP	3240	11/29	6	1.0	3.8	-
			12/27	17	4.7	17.9	10.9
			1/29	37	10.9	28.6	19.6
Blewett Pass No. 2	20B02	4270	12/28	17	4.7	13.5	6.3
			1/30	21	5.4	27.7	11.2
Chiwaukum G. S.	20B16	1810	12/14	6	0.5	7.6	2.7
			12/27	7	2.0	10.4	4.6
			1/15	14	3.6	14.0	7.5
			1/29	19	4.1	16.6	9.0
Lake Wenatchee	20B05	1970	11/29	3	1.2	1.7	-
			12/14	8	0.6	8.4	3.7
			12/27	8	2.6	11.3	5.8
			1/15	22	4.9	15.3	9.6
			1/29	24	5.4	20.4	12.0
Leavenworth R. S.	20B17	1127	12/11	2	0.5	4.9	-
			1/1	No Report		6.9	2.9
			1/12	10	1.9	7.8	4.0
			1/31	9	3.3	10.9	5.0
Lyman Lake +	20A23A	5900	1/30	130	39.0	-	38.9
Merritt	20B18	2140	11/29	3	0.6	1.8	2.9
			12/14	9	0.5	9.8	4.6
			12/27	8	2.8	12.0	8.0
			1/15	23	5.2	17.8	12.0
			1/29	29	6.7	23.0	14.1
Stevens Pass	21B01	4070	10/31	8	1.1	2.4	-
			11/14	13	2.9	6.3	-
			11/29	24	6.0	10.6	10.0
			12/14	39	8.4	21.2	14.7
			12/27	52	15.4	30.3	20.8
			1/15	64	21.8	46.0	26.6
			1/29	78	26.0	60.1	34.4
Stevens Pass Sand Shed	21B45	3700	11/29	12	2.5	5.6	-
			12/14	20	3.5	14.6	-
			12/27	35	9.1	21.1	-
			1/15	46	14.6	32.9	-
			1/29	54	18.4	42.7	-

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 6

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	2/1	26	8.3	19.2	-
Colockum Creek Lower	20B23	4300	2/1	22	6.0	14.5	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	1/31	16	5.3	12.5	5.1
Scout-A-Vista	20B04	3400	1/31	19	5.8	12.2	5.4
STEMILT CREEK							
Jump-Off	20B08	4450	1/31	20	6.0	15.0	4.8
Stemilt Slide	20B06	5000	1/31	36	10.0	20.1	10.0
Upper Wheeler	20B07	4400	1/31	17	6.0	17.1	6.5
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	12/27	6	1.5	6.2	3.2
			1/26	12	4.0	10.7	5.7
Blewett Pass No. 2	20B02	4270	12/28	17	4.7	13.5	6.3
			1/30	21	5.4	27.7	11.2
Bumping Lake Old	21C08	3450	1/2	13	3.6	9.2	6.6
			1/18	21	6.6	14.6	10.6
			1/31	28	8.0	18.9	12.3
Bumping Lake New	21C36	3400	1/2	14	4.1	11.8	-
			1/18	27	9.1	18.4	12.4
			1/31	29	7.0	24.9	14.9
Cayuse Pass	21C06	5300	12/29	78	23.8	51.2	34.3
			2/1	106	38.9	89.8	56.3
Colockum Pass	20B09	5370	1/31	39	10.6	19.7	10.5
Cooke Creek	20B10	4123	1/31	11	3.4	13.0	5.0
Grouse Camp	20B11	5385	1/30	37	10.0	22.2	12.2
High Creek	20B12	2930	1/30	13	3.0	13.1	4.6
Joe Lake +	21B46a	4624	11/23	72	18.0	70.0	-
Green Lake	21C10	6000	1/29	58	18.2	-	-
Lake Cle Elum	21B14M	2200	10/31	0	0.0	1.9	-
			11/14	0	0.0	0.0	-
			12/14	12	1.0	6.4	1.7
			12/29	0	0.0	7.6	3.9
			1/11	10	1.6	14.5	5.9
			1/29	13	3.6	18.4	7.8
Lemah Creek +	21B47a	3327	1/23	57	14.2	48.0	-
Manashtash	20C01	3935	1/29	10	2.4	8.8	3.4
Morse Lake	21C17	5400	1/29	92	34.2	63.3	39.7
Nanum	20B13	3875	1/30	19	4.5	15.0	6.9

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 7

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
Olallie Meadows	21B2	3625	2/1	44	14.6	59.7	30.2
Satus Pass	20D01	4030	1/31	12	3.1	13.8	8.1
Stampede Pass Pillow	21B10	3860	1/1	-	11.5	16.6	16.9
			1/18	-	14.8	38.6	21.4
			2/1	-	18.5	50.0	28.8
Trail Creek	20B14	3360	1/31	0	0.0	8.9	-
Tunnel Avenue	21B08	2450	10/31	0	0.0	1.8	-
			11/14	0	0.0	0.0	-
			12/14	16	1.0	11.3	5.5
			12/29	15	4.5	13.5	8.6
			1/11	25	6.4	20.4	13.1
			1/29	37	9.6	27.9	17.0
Van Epps Pass +	20B26a	5925	1/23	77	19.2	61.4	-
Walters Flat	20B15	3360	1/30	12	3.9	13.8	5.9
Waptus Lake +	21B49a	3024	1/23	63	15.8	53.8	-
White Pass (E. Side)	21C28	4500	1/4	22	5.7	17.3	11.1
			1/17	27	8.1	-	13.7
			1/30	29	9.1	40.9	16.7
White Pass (L. Lake)	21C27	4500	1/30	30	9.4	46.9	20.6
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	12/27	6	1.5	6.2	3.2
			1/26	12	4.0	10.7	5.7
Green Lake	21C10	6000	1/29	58	18.2	-	-
LOWER COLUMBIA DRAINAGE							
ASOTIN CREEK							
Spruce Springs	17C4	5700	1/29	31	9.4	27.6	-
MILL CREEK							
Homestead	17C1	4030	1/31	6	1.2	14.4	5.5
Martin Springs	17C02	4400	1/30	8	1.8	19.9	8.4
KLICKITAT RIVER							
Satus Pass	20D1	4030	1/31	12	3.1	13.8	8.1
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	1/3	34	10.3	29.7	15.4
			1/29	54	16.4	54.4	29.4
Surprise Lakes	21C13A	4250	1/3	36	10.8	35.0	18.5
			1/29	49	15.8	66.8	32.7

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

M-SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 8

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WIND RIVER							
Old Man Pass	21D19	3100	12/29	2	0.8	12.9	4.1
			2/1	24	5.0	26.8	12.5
LEWIS RIVER							
Blue Lake +	21C22a	4800	1/3	88	25.5	51.0	30.1
			1/29	108	34.6	92.5	56.0
Bob's Trail	21C21	2200	12/29	2	1.0	13.0	6.3
			1/29	14	3.3	26.7	9.7
Calamity Ridge +	22D01a	2500	1/3	8	1.2	12.5	-
			1/29	1	0.2	20.4	-
Council Pass +	21C18a	4200	1/3	36	10.1	28.4	18.4
			1/29	56	17.9	56.2	27.4
Cultus Creek	21C12	4000	1/3	34	10.3	29.7	15.4
			1/29	54	16.4	54.4	29.4
Divide Meadow +	21C29a	5600	1/1	58	16.8	33.3	24.7
			1/29	52	16.6	71.4	39.5
Grand Meadow	21C25	3500	1/3	14	4.1	19.1	9.7
			1/29	31	8.4	37.1	16.9
Lone Pine Shelter	21C26	3800	1/3	29	7.0	30.0	17.7
			2/1	54	12.7	49.9	28.8
Marble Mountain +	22C05a	3200	12/29	12	4.0	26.6	10.5
			1/29	21	7.1	57.1	24.4
Mosquito Meadows	21C19	4100	1/3	32	8.6	30.6	19.2
			2/1	52	15.3	51.9	31.8
New Muddy River	22C06	2200	12/29	0	0.0	13.0	5.8
			2/1	8	1.7	21.6	9.9
Old Man Pass	21C19	3100	12/29	2	0.8	12.9	4.1
			2/1	24	5.0	26.8	12.5
Plains of Abraham +	22C01a	4400	1/3	65	19.5	49.8	22.1
			1/29	90	28.8	70.7	39.0
Smith Creek Road	22C04	2100	12/29	0	0.0	19.6	6.5
			2/1	20	6.0	29.0	11.9
Spencer Meadow +	21C20a	3400	12/29	11	3.2	20.6	7.8
			1/29	31	8.4	34.3	14.3
Surprise Lakes	21C13A	4250	1/3	36	10.8	35.0	18.5
			1/29	49	15.8	66.8	32.7
Table Mountain +	21C24a	4200	1/3	42	11.8	31.3	21.1
			1/29	64	20.5	59.2	32.1
Timbered Peak +	21D18a	3000	12/29	4	1.2	19.2	7.6
			2/1	24	6.0	25.8	12.5

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

V504-SCS-PORTLAND, OREGON 1973

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COWLITZ RIVER							
Cayuse Pass	21C06	5300	12/29	78	23.8	51.2	34.3
			2/1	106	38.9	89.8	56.3
Mosquito Meadows	21C19	4100	1/3	32	8.6	30.6	19.2
			2/1	53	15.4	51.9	31.8
Ohanapecosh	21C32	2200	12/29	1	0.1	11.0	4.2
			1/29	9	3.3	23.9	13.7
Packwood Lake	21C31	2870	12/29	3	0.7	11.2	4.0
			1/31	12	2.9	26.8	8.6
Pigtail Peak	31C33	5900	1/1	61	22.5	37.2	26.0
			1/30	80	30.0	76.5	40.9
Plains of Abraham +	22C01a	4400	1/3	65	19.5	49.8	22.1
			1/29	90	28.8	70.7	39.0
Potato Hill	21C14	4500	1/3	34	8.0	22.7	-
			2/1	41	11.5	45.6	20.8
White Pass (E. Side)	21C28	4500	1/4	22	5.7	17.3	11.1
			1/30	29	9.1	40.9	16.7
White Pass (L. Lake)	21C27	4500	12/28	17	5.7	18.9	13.3
			1/30	30	9.4	46.9	20.6
Willame Creek	21C30	3250	12/29	15	4.0	22.0	9.6
			1/29	31	9.4	41.8	21.4
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	12/28	40	12.8	31.5	13.1
			1/29	52	17.3	60.0	30.7
Longmire	21C03	2760	12/28	4	0.4	11.8	2.2
			1/29	8	2.8	23.8	7.3
New Paradise Park	21C35	5400	12/28	72	22.0	46.6	22.2
			1/29	91	34.6	85.8	46.1
Stem Glade	21C01	5050	1/1	68	20.4	40.7	24.8
			1/29	85	30.9	84.9	47.1
WHITE RIVER							
Cayuse Pass	21C06	5300	12/29	78	23.8	51.2	34.3
			2/1	106	38.9	89.8	56.3
GREEN RIVER							
Airstrip	21B24	1800	11/27	0	0.0	0.0	-
			12/29	0	0.0	6.4	-
			1/29	5	1.6	10.1	-

Average based on 1953-67 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 10

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
GREEN RIVER (Cont.)							
Charley Creek	21B25	1200	11/27	0	0.0	0.0	-
			12/28	0	0.0	4.2	-
			1/29	0	0.0	2.2	-
Cougar Mountain	21B42SP	3200	12/29	13	3.4	14.8	-
			2/1	21	6.2	31.2	-
Grass Mtn. No. 2	21B27	2900	11/27	1	0.2	2.0	2.7
			12/28	10	2.1	17.0	6.0
			1/29	17	6.0	31.1	13.6
Grass Mtn. No. 3	21B28	2100	11/27	0	0.0	0.0	-
			12/28	4	0.5	9.8	-
			1/29	5	1.5	15.0	-
Lester Creek	21B29	3100	11/27	2	0.3	4.2	3.5
			12/29	15	3.8	18.4	9.8
			1/29	29	7.8	31.8	16.3
Lynn Lake	21B50	4000	11/27	2	0.3	2.5	-
			1/1	15	3.2	23.5	-
			1/29	7	2.2	43.2	-
Sawmill Ridge	21B31	4700	11/27	8	1.9	7.2	8.0
			12/29	36	8.8	24.0	12.0
			1/29	40	13.7	49.6	27.8
Snowshoe Butte	21B43SP	5000	12/29	54	15.4	31.4	-
			2/1	74	27.2	72.4	-
Stampede Pass Pillow	21B10	3860	Not Measured			7.2	7.4
			Not Measured			22.8	10.8
			1/1	-	11.5	16.6	16.9
			1/18	-	14.8	38.6	21.4
			2/1	-	18.5	50.0	28.8
Twin Camp	21B30	4100	11/27	4	0.7	4.7	5.3
			12/29	24	4.7	17.5	10.8
			1/29	25	7.7	30.0	19.3
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	2/1	44	14.6	59.7	30.2
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	10/31	8	1.1	2.4	-
			11/14	13	2.9	6.3	-
			11/29	24	6.0	10.6	10.0
			12/14	39	8.4	21.2	14.7
			12/27	52	15.4	30.3	20.8
			1/15	64	21.8	46.0	26.6
			1/29	78	26.0	60.1	34.4

Average based on 1953-67 average

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WSFB-X4-L

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 11

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SKYKOMISH RIVER (Cont.)							
Stevens Pass Sand Shed	21B45	4070	11/29	12	2.5	5.6	-
			12/14	20	3.5	14.6	-
			12/27	35	9.1	21.1	-
			1/15	46	14.6	32.9	-
			1/29	54	18.4	42.7	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	1/29	19	6.6	16.0	-
Beaver Pass	21A01	3680	1/28	47	14.0	34.6	-
Brown Top Ridge +	21A28a	6000	1/28	116	38.6	61.0	-
Cloudy Pass +	20A22a	6500	1/30	74	22.2	40.3	29.4
Devils Park	20A04	5900	1/28	85	27.2	45.9	30.2
Freezeout Creek Trail	20A01	3500	1/28	27	8.0	18.2	-
Freezeout Meadows New	20A38	5000	1/28	61	17.4	New Course	
Granite Creek	21A29A	3500	1/27	38	10.4	22.5	-
Harts Pass	20A05A	6500	1/28	89	25.9	44.3	28.2
Klesilkwa	35B-Can	3700	2/1	24	5.0	-	10.7*
Lake Hozomeen	21A02	2600	1/29	10	2.6	12.5	-
Lyman Lake	20A23A	5900	1/30	130	39.0	-	38.9
Meadow Cabins	20A08	1900	1/27	9	2.8	13.0	-
New Hozomeen Lake	21A30	2800	1/29	19	4.8	16.0	-
New Tashme	26A-Can	2500	1/29	11	4.0	20.1	8.7*
Rainy Pass	20A09	4780	1/27	88	26.0	43.8	27.5
Thunder Basin	20A07	4200	1/29	42	11.2	27.4	-
BAKER RIVER							
Baker Pass +	21A27a	4900	Not Measured				
Dock Butte +	21A11A	3800	10/30	12	3.6		
			11/14	20	6.0		
			12/4	28	8.4		-
			12/15	36	12.6	38.1	-
			1/3	70	27.0	45.5	-
			1/26	96	41.0	70.3	46.8
Easy Pass +	21A7A	5200	10/30	2	0.6		
			11/14	18	5.4		
			12/4	24	7.2	-	-
			12/15	25	8.7	33.0	-
			1/3	68	26.0	40.6	-
			1/26	88	38.0	72.6	59.0

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 12

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER (Cont.)							
Jasper Pass +	21A6A	5400	10/30	8	2.4		
			11/14	28	8.4		
			12/4	53	15.9	-	-
			12/15	Not Measured		49.5	-
			1/3	120	46.0	57.4	-
			1/15	Not Measured		-	55.7
			1/26	148	64.0	89.3	68.5
Marten Lake	21A09A	3600	10/30	12	3.6		
			11/14	10	3.0		
			12/4	40	12.0	-	-
			12/15	46	16.1		
			1/3	88	33.0	57.0	-
			1/15	Not Measured		-	50.9
			1/26	118	51.0	82.1	56.4
Mt. Blum +	21A18a	5800	10/30	4	1.2		
			11/14	12	3.6		
			12/4	29	8.7	-	-
			12/15	N/A Windy		35.1	-
			1/3	100	38.0	41.6	-
			1/26	108	46.0	54.7	46.5
Panorama New	21A26	4300	1/15	81	30.7	53.7	-
			1/29	102	35.7	71.3	-
Rocky Creek	21A12A	2100	10/30	15	4.5		
			11/14	0	0.0		
			12/4	2	0.6		
			12/15	18	6.3	20.4	-
			1/3	23	9.0	26.2	-
			1/26	96	41.0	44.5	19.6
Schreibers Meadow	21A10A	3400	10/30	3	0.9		
			11/14	4	1.2		
			12/4	12	3.6	-	-
			12/15	22	7.7	30.0	-
			1/3	48	18.0	41.3	-
			1/26	72	31.0	56.2	42.5
S. F. Thunder Creek +	21A14A	2200	10/30	2	0.6		
			11/14	0	0.0		
			12/4	1	0.3		
			12/15	6	2.1	-	-
			1/3	8	3.0	14.0	-
			1/26	6	3.0	22.8	4.6

\# Average based on 1953-67 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 13

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
BAKER RIVER (Cont.)							
Watson Lakes	21A08A	4500	10/30	10	3.0		
			11/14	12	3.6		
			12/4	32	9.6		
			12/15	N/A	Windy	35.4	-
			1/3	62	24.0	46.9	-
			1/26	86	37.0	68.4	46.0
NOOKSACK RIVER							
Glacier Creek	21A23	3700	12/1	0	0.0	4.1	-
			1/3	22	5.4	15.6	-
			2/2	33	7.9	32.8	
Panorama New	21A26	4300	1/15	81	30.7	53.7	-
			1/29	102	35.7	71.3	-
O L Y M P I C P E N I N S U L A							
DUNGENESS RIVER							
Deer Park	23B04	5200	1/31	43	13.3	24.6	16.3
MORSE CREEK							
Cox Valley	23B14	4500	1/28	71	23.8	47.6	-
ELWHA RIVER							
Hurricane	23B03	4500	1/30	45	11.7	26.5	17.5
SKOKOMISH RIVER							
Black & White	23B07	4200	1/1	43	12.8	24.2	-
			1/27	74	22.9	40.5	29.0
Black & White Lakes	23B06	4700	1/3	65	24.7	37.6	-
			1/27	97	36.7	61.4	41.5
Four Streams	23B10	3000	1/3	10	2.4	24.3	-
			1/27	35	9.4	33.2	26.7
Home Sweet Home	23B05	5200	1/3	83	28.4	48.0	-
			1/27	122	43.8	74.0	54.8
SOLEDUCK RIVER							
Deer Lake	23B01	3900	Not Measured				

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973.

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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WATER SUPPLY OUTLOOK FOR WASHINGTON

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UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF
MAR. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

USDA SCS PORTLAND OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

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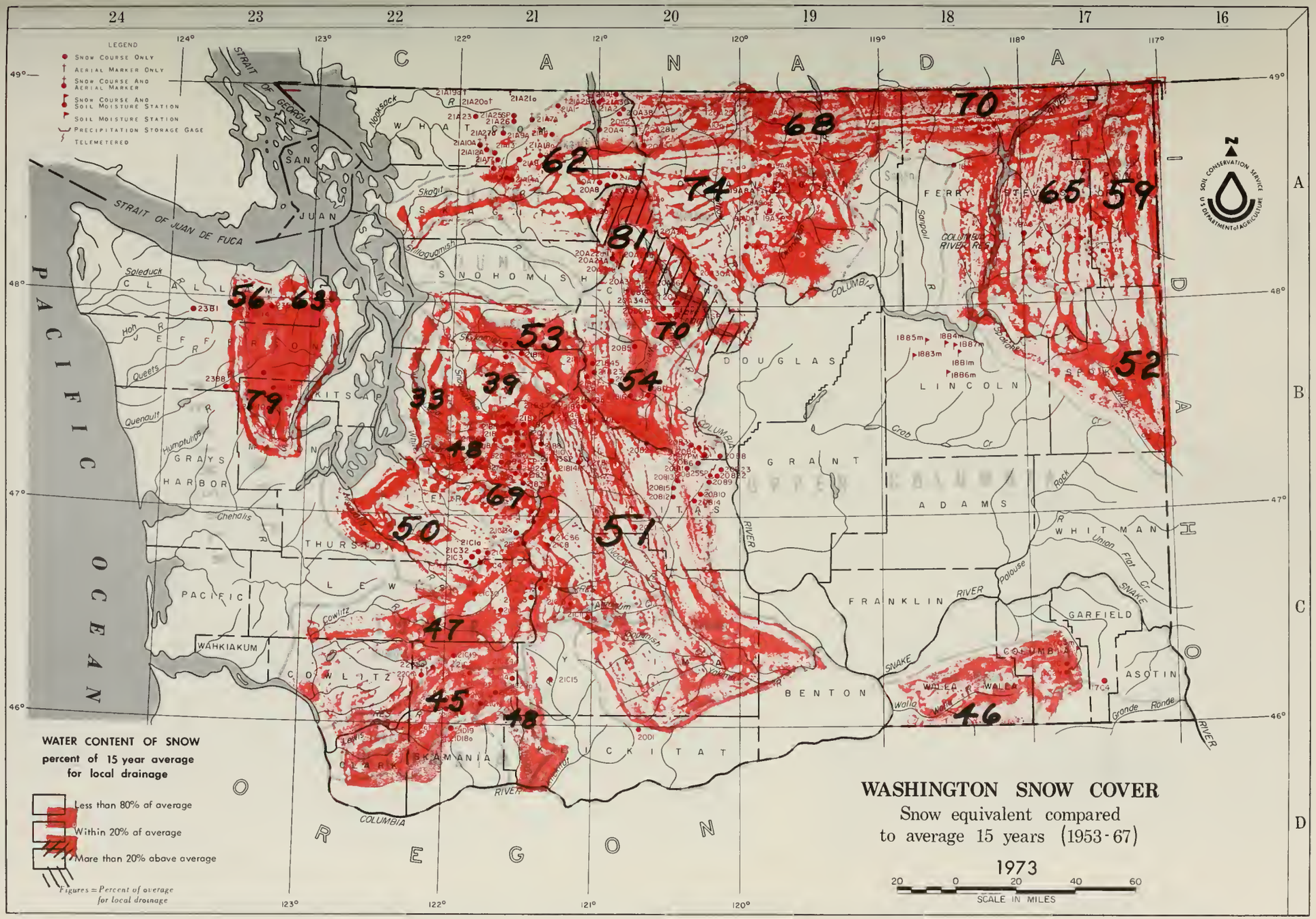
WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1953-67)
1973
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
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OREGON
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WALLA WALLA
DOUGLAS
LINCOLN
SPOKANE
STEVENS
FERRY
COLUMBIA RIVER
SNAKE RIVER
Nooksack
Skagit
Stillaguamish
Snohomish
Skykomish
Snoqualmie
Cedar
Green
Puyallay
Nisqually
Chehalis
Cowlitz
Lewis
Kalama
Washougal
Wind
Klickitat
Yakima
Columbia
Saleduck
Hoh
Queets
Quenault
Humptulips
Sanpoil
Spokane
Crab Cr
Rock
Palouse
Union Flat Cr
Walla Walla
Grande Ronde
Snake
Tucannon
Pataha
Alkali Cr
Goldmark
Yakima
Rock
Wind
Lewis
Kalama
Washougal
Wind
Klickitat
Yakima
Columbia
Saleduck
Hoh
Queets
Quenault
Humptulips
Chehalis
Cowlitz

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	1883m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	1B85m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Oivide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21018a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C3S	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Oevils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baker Pass	21A27a	1	37N	7E	4900
Oock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Oeer Park	23B4	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23B14	29	28N	6W	

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	23B3	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900

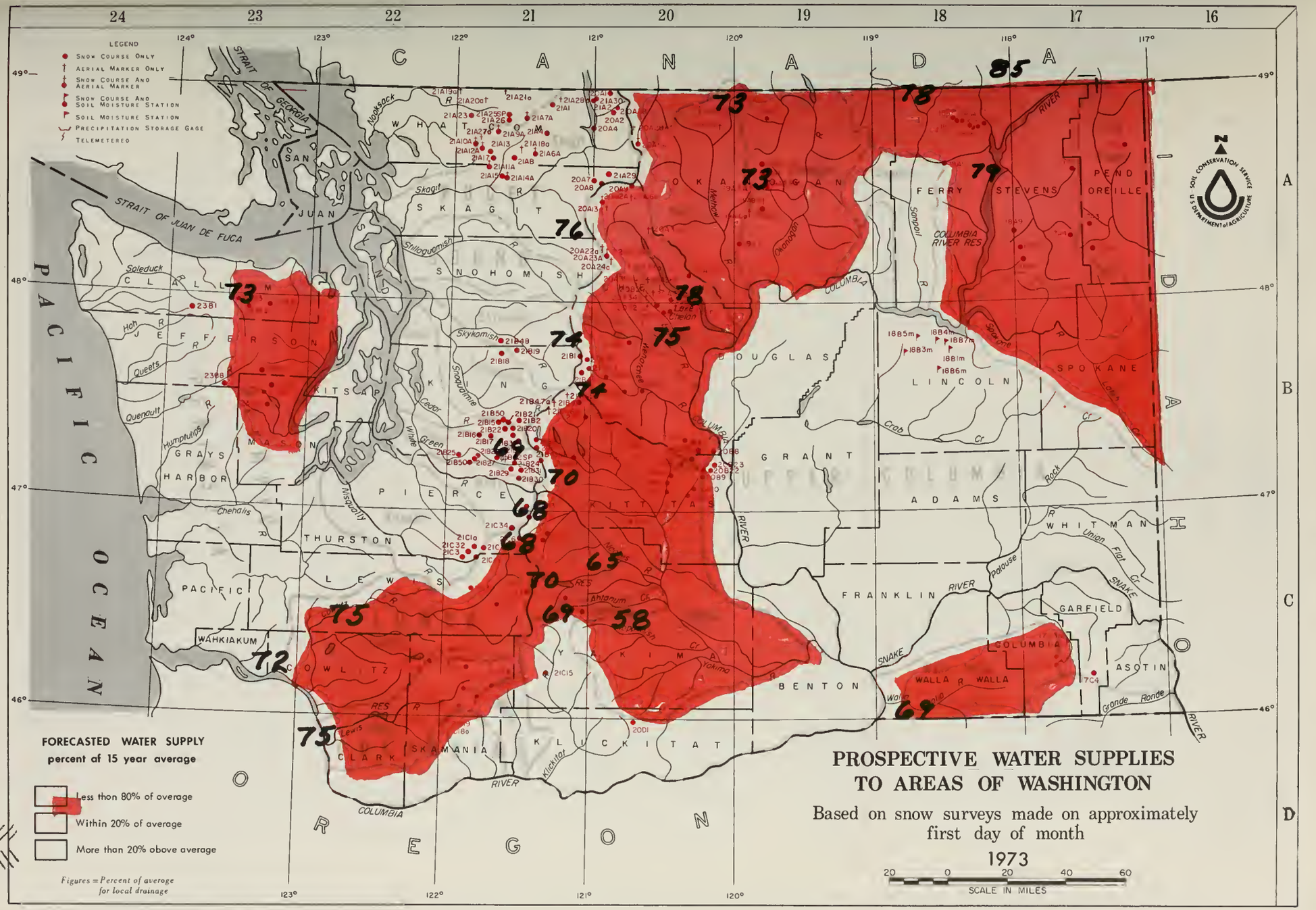
Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1973
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average
for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
OREGON
PACIFIC OCEAN
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
OKANOGAN
FERRY
STEVENS
PEND OREILLE
COLUMBIA RIVER RES
CLALLAM
JEFFERSON
KITSAP
KING
DOUGLAS
LINCOLN
SPOKANE
GRAYS HARBOR
MASON
PIERCE
KITTITAS
GRANT
ADAMS
WHITMAN
THURSTON
LEWIS
PACIFIC
FRANKLIN
GARFIELD
COLUMBIA
WAHKIAKUM
COWLITZ
YAKIMA
BENTON
WALLA WALLA
ASOTIN
CLARK
SKAMANIA
KLICKITAT
COLUMBIA RIVER
SNAKE RIVER
Lake Chelan
Lake Roosevelt
Ahtanum Cr
Yakima
Grande Ronde
Palouse
Union Flat Cr
Rock Cr
Crab Cr
Okanogan
Methow
Similkameen
Skykomish
Snoqualmie
Stillaguamish
Skagit
Nooksack
Sanpoil
Spokane
Lewis
Klickitat
Nisqually
Chehalis
Cedar
White
Green
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Humptulips
Soleduck
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	1BA3	28	39N	35E	4070
Cabin Creek	1BA8	5	3BN	36E	3170
Goat Creek	1BA4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	1BA6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	3BE	2B85
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	3BE	3370
Sanpoil River					
Sherman Creek Pass	1BA1	19	36N	35E	5350
Okanogan River					
Clark	19ABa	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	3SN	24E	400D
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	284S
Methow River					
Billy Goat Pass	20A10a	10	3BN	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	46S0
Chelan Loke Bosin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	527S
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
8rief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	700D
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	1BE	5300
Wenotchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Dff	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	1BB7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yokima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	34S0
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3B75
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21BB	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B1S	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4S00

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	BN	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Oivide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Dhanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisquolly River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	BE	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B2S	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B2B	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	1B	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Dlallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skogit River					
Beaver Creek Trail	21A4	35	39N	12E	22D0
Beaver Pass	21A1	9	39N	12E	36B0
Brown Top	21A2Ba	26	40N	12E	6000
Oevils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	B	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
ðoker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	BE	3800
Easy Pass	21A7A	19	39N	11E	S200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	B00
Marten Lake	21A9A	23	38N	8E	36D0
Mount Blum	21A1Ba	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	BE	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	BE	1600
Three Mile Creek	21A1S	18	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGENO

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow

WATER SUPPLY OUTLOOK

State of Washington
March 1, 1973

* *
* There has been a further deterioration of the snow pack from that *
* which was reported last month. This means that even less water *
* will be coming out of the mountain watersheds than was antici- *
* pated. Direct comparison of the snow cover maps is not completely *
* accurate because there are many more snow courses used for com- *
* parison purposes on March 1 than used on February 1. Roughly *
* speaking, the snow packs have deteriorated 5%. Snow cover now *
* ranges from a high of 19% below normal to a low of 67% below. The *
* storms that occurred during the first week in February in north *
* central Washington were enough to affect the precipitation aver- *
* ages for this area, but not enough of this precipitation fell at *
* high elevations, or fell and did not melt off, to make any dif- *
* ference in snow cover. Precipitation was all well below normal *
* except for this small north central area. Runoff during February *
* was also extremely light, ranging from 12% below normal for *
* Columbia and Kettle to 70% below normal for the Chehalis. As was *
* reported last month, irrigation reservoirs continue to have *
* greater than normal amounts of stored water, while the power res- *
* ervoirs generally have near average amounts. *
* *

SNOW COVER

The snow cover of the watersheds of the state of Washington have the lowest snow pack measured since March 1 of 1963. Although the snow packs were lighter in that year, the situation could end up very similar unless well above normal precipitation occurs during the next month. The snow cover in the northeast ranges from 52% of normal for the Spokane to 70% of normal for the Kettle. In the north central area, the snow pack is now 32% below normal to 19% below. In the Wenatchee-Yakima area, the snow cover is only about half normal. Along the lower Columbia, the snow pack ranges from 67% below normal to 52% below. Puget Sound drainages indicate the snow cover to be from 62% to 31% below. We normally would show a snow cover percentage for the Klickitat River as measured by Satus Pass snow course, but this snow course was completely bare of snow as of March 1.

RESERVOIRS

The water storage picture continues to be the only bright spot in the water supply picture. The irrigation reservoirs in the Yakima drainage are 15% greater than average, while the two small reservoirs in the Okanogan drainage are 25 to 100% greater than normal. Chelan Lake appears to be the only reservoir that does not have normal or greater amounts of stored water. This power reservoir is scheduled to be filled as soon as possible for summer storage.

PRECIPITATION

As reported by the National Weather Service, February precipitation ranged from 79% below normal for central Washington to 12% above for the north central. This precipitation accumulated for the four months of winter now ranges, percentagewise, from 28% below normal to 17% below. This lack of rainfall, and the lack of snow fall at upper elevations during a month when it is vitally necessary, will result in a much depleted water supply.

STREAMFLOW

As can be imagined from the previous statements, the rivers had a very low runoff during the month, so what little snow that fell at the upper elevations and the rain that fell in the valleys has gone to maintain the soil moisture in the soil mantle. Flows reported by the Geological Survey ranged from 70% below normal for the Chehalis to 18% below in the north eastern corner of Washington. Forecasts of streamflow for the coming runoff period can be found in the following tabulation. These forecasts range from a high of 14% below normal to a low of 42% below normal.

STREAMFLOW FORECASTS - MARCH 1973

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1972 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft: Forecast Period	1972	1971	1970	15-Yr Average 1953-67
		COLUMBIA BASIN					
Columbia River System							
Columbia River	39560	85	Apr-Sep	52590	48592	34490	46368
at Birchbank 1/	32330	86	Apr-Jul	42700	39462	27840	37480
	23250	86	Apr-Jun	31000	29759	20890	27040
Columbia River	55570	80	Apr-Sep	83880	75360	54617	69458
at Grand Coulee 1/	46400	79	Apr-Jul	71820	64444	46563	58899
	34400	75	Apr-Jun	56200	51550	37574	45889
Columbia River	59500	78	Apr-Sep	98040	84965	58544	76241
bl Rock Island Dam 1/	48300	75	Apr-Jul	84520	73096	50236	64777
	37200	74	Apr-Jun	66100	58235	40675	50387
Columbia River	78500	75	Apr-Sep	134620	123427	88146	105176
at The Dalles, OR 1/	65000	72	Apr-Jul	117810	107702	76054	90050
	50700	70	Apr-Jun	96290	88936	62847	72410
Pend Oreille River System							
Pend Oreille River	11220	70	Apr-Sep		19190	14737	16030
bl. Box Canyon	10200	69	Apr-Jul		17980	13676	14788
	8670	68	Apr-Jun		15640	11985	12754
Kettle River System							
Kettle River	1495	78	Apr-Sep		2240	1099	1918
nr. Laurier	1435	79	Apr-Jul		2177	1068	1821
	1285	78	Apr-Jun		1927	1004	1644

1/ Observed flow corrected for storage in any of the following reservoirs which are above the stateion: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Streamflow Forecasts - March 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft: Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Kettle River System (Cont.)							
Colville River	121	79	Apr-Sep		170	94	153
at Kettle Falls	111	79	Apr-Jul		158	86	141
	103	79	Apr-Jun		146	80	131
Spokane River System*							
Spokane River	1750	56	Apr-Sep		3907	2514	3151
at Post Falls ID 2/	1660	54	Apr-Jul			2418	3055
	1610	55	Apr-Jun			2274	2913
Okanogan River System							
Similkameen River	1110	73	Apr-Sep	3162	1931	850	1525
nr. Nighthawk	1035	73	Apr-Jul	2998	1840	808	1419
	877	73	Apr-Jun	2505	1576	739	1197
Okanogan River	1270	73	Apr-Sep	3824	2225	923	1738
nr. Tonasket	1100	70	Apr-Jul	3481	2077	864	1578
	925	70	Apr-Jun	2846	1772	785	1318
Methow River System							
Methow River	825	78	Apr-Sep		1339	622	1054
nr. Pateros	765	78	Apr-Jul		1259	587	981
	660	79	Apr-Jun		1061	532	834
Chelan River System							
Chelan River	950	75	Apr-Sep	1965	1550	905	1266
at Chelan 3/	850	76	Apr-Jul	1717	1352	816	1119
	660	76	Apr-Jun	1309	1019	683	870
Stehekin River							
at Stehekin	690	76	Apr-Sep	1093	1093	678	904
	585	76	Apr-Jul	927	927	589	772
	450	77	Apr-Jun	657	657	478	586
Entiat	172	--	Apr-Sep		310	160	--
nr. Ardenvoir	158	--	Apr-Jul		280	148	--
	133	--	Apr-Jun		209	129	--

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

Streamflow Forecasts - March 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft: Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Wenatchee River System							
Wenatchee River	992	74	Apr-Sep		1637	1019	1333
at Plain	907	74	Apr-Jul		1448	941	1204
	713	75	Apr-Jun		1045	804	952
Wenatchee River	1350	74	Apr-Sep	2808	2241	1416	1814
at Peshastin	1240	75	Apr-Jul	2481	1999	1318	1651
	1000	76	Apr-Jun	1891	1454	1132	1316
Stemilt Basin nr. Wenatchee	105*	80	May-Sep	145*	148*	123*	131*
Yakima River System							
Yakima River	100	69	Apr-Sep	213	192	131	145
nr. Martin 4/	92	69	Apr-Jul	192	179	123	134
	84	72	Apr-Jun	160	139	114	116
Yakima River	674	70	Apr-Sep	1300	1300	866	968
at Cle Elum 5/	625	71	Apr-Jul	1354	1179	803	885
	560	73	Apr-Jun		934	723	762
Yakima River	1010	58	Apr-Sep		2873	1491	1738
nr. Parker 6/	1015	59	Apr-Jul		2620	1512	1722
	950	60	Apr-Jun		2153	1461	1583
Kachess River	85	66	Apr-Sep	196	172	115	128
nr. Easton 7/	80	66	Apr-Jul	182	163	112	122
	75	70	Apr-Jun	153	130	104	107
Cle Elum River	340	70	Apr-Sep	750	627	435	485
nr. Roslyn 8/	315	71	Apr-Jul	673	568	402	445
	270	72	Apr-Jun	538	433	350	373
Bumping River	102	68	Apr-Sep	234	193	129	150
nr. Nile 9/	94	68	Apr-Jul	209	174	122	138
	82	72	Apr-Jun	156	124	107	114

* Thousands of Miners' inches.

4/ Observed flow corrected for storage in Lake Keechelus.

5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

7/ Observed flow corrected for storage in Lake Kachess.

8/ Observed flow corrected for storage in Lake Cle Elum.

9/ Observed flow corrected for storage in Bumping Lake.

Streamflow Forecasts - March 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft: Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Yakima River System (Cont.)							
American River	88	68	Apr-Sep		172	128	129
nr. Nile	82	68	Apr-Jul		154	120	120
	72	73	Apr-Jun		113	106	99
Tieton River							
at Tieton Dam 10/	176	70	Apr-Sep	396	326	244	251
	149	69	Apr-Jul	338	272	207	215
	121	70	Apr-Jun	261	198	172	172
Naches River	585	65	Apr-Sep		1140	841	899
nr. Naches 11/	535	65	Apr-Jul		1039	779	819
	470	67	Apr-Jun		823	694	698
Ahtanum Creeks	33	69	Apr-Sep		63	43	49
nr. Tampico 12/	30	67	Apr-Jul		57	39	45
	27	68	Apr-Jun		48	35	40
Lower Columbia River System							
Mill Creek	20	69	Apr-Sep		30	27	29
nr. Walla Walla	17	68	Apr-Jul		26	23	25
	15	65	Apr-Jun		24	21	23
Lewis River	1020	75	Apr-Sep		1827	914	1358
at Ariel 13/	870	73	Apr-Jul		1605	798	1197
	780	7[illegible]	Apr-Jun		1341	723	1059
Cowlitz River blw.	1620	7[illegible]	Apr-Sep		2800	1615	2160
Mayfield Dam	1390	7[illegible]	Apr-Jul		2463	1425	1908
	1210	7[illegible]	Apr-Jun		1935	1245	1612
Cowlitz River	2031	[illegible]	Apr-Sep		3710	2134	2818
at Castle Rock 14/	1770	7[illegible]	Apr-Jul		3253	1873	2487
			Apr-Jun		2585	1652	2119
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	125	73	Apr-Sep		196	136	172
nr. Sequim	104	74	Apr-Jul		154	115	141
	79	75	Apr-Jun		105	89	105

10/ Observed flow corrected for storage in Rimrock Lake
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about March 1, 1973, as per cent of the same date in 1972 and 1971 and average of record.

Tributary Basin	No. of Courses Average	1973 Snow Water Expressed as percent of 1972	1971	1953-67
		UPPER COLUMBIA BASIN		
Pend Oreille	14	46	54	59
Kettle	15	57	63	70
Colville	5	67	64	65
Spokane	10	32	44	52
Okanogan	36	46	62	68
Methow	8	46	56	74
Chelan	9	51	59	81
Entiat	8	44	57	70
Wenatchee	9	29	38	54
Yakima	11	27	43	51
Ahtanum	Not Available			
		LOWER COLUMBIA		
Hill Creek	3	24	55	46
White Salmon	2	40	30	48
Wind	1	17	16	33
Lewis	7	23	26	45
Cowlitz	8	26	31	47
		PUGET SOUND		
Nisqually	4	26	34	50
White	3	37	53	69
Green	6	24	29	48
Cedar	6	16	19	33
Snoqualmie	3	21	26	38
Skykomish	4	34	40	60
Skagit	15	34	45	62
Nooksack	4	51	60	--
		OLYMPIC PENINSULA		
Skokomish	4	47	49	79
Elwha	1	41	53	56
Dungeness	1	44	60	63

RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (March) 1973	1972	1971	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	53.3	248.0	154.2	149.4
Columbia	Franklin D. Roosevelt Lake	5232.0	3729.1	2735.6	4666.2	2985.2
Columbia	Banks Lake	761.8	613.3	714.9	712.2	511.7
Okanogan	Conconully Reservoir	13.0	11.6	9.6	5.8	6.1
Okanogan	Salmon Lake	10.5	9.5	8.6	2.1	8.5
helan	Lake Chelan	676.1	141.4	126.5	257.0	243.7
		YAKIMA				
akima	Keechelus Lake	157.8	102.0	151.9	123.0	99.0
aches	Kachess Lake	239.0	195.0	179.0	201.1	178.5
le Elum	Lake Cle Elum	436.9	319.1	312.1	231.3	266.0
umping	Bumping Lake	33.7	9.1	9.2	5.2	11.0
ieton	Rimrock Lake	198.0	153.3	139.6	122.9	124.1
		PUGET SOUND				
kagit	Ross Reservoir	1202.0	870.3	680.1	912.7	851.6
kagit	Diablo Reservoir	90.6	89.0	83.8	83.4	85.9
kagit	Gorge Reservoir	9.8	8.1	7.3	8.3	- -

Based on Active Storage

15-year average 1953-67

SOIL MOISTURE - MARCH

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content (Inches) as of Mar. 1 1973	1972	1971
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	7.7	8.1	9.8
Krause	18B4m	2420	48	13.6	7.0	7.0	6.2
Sheffels	18B5m	2380	48	13.6	8.2	8.8	7.7
Sherman	18B7m	2440	48	13.6	6.8	7.4	7.8
Wheatridge	18B6m	2290	48	13.6	6.7	8.7	10.5
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	2.3	3.6	3.6
Trout Creek	3-M	3600	48	7.3	3.2*	4.3*	2.9*
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	5.2	-	5.0
Lake Cle Elum	21B14M	2200	48	12.8	9.2	-	9.2
WALLA WALLA							
Couse	17C3m	3650	48	11.1	7.6	10.8	10.1
Helmers	17C2M	4400	48	12.0	10.6	11.6	10.7
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	8.9	10.0	10.1

* February Readings

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content (Inches) as of Oct. 1 1972	1971	1970
RAB CREEK							
ack Woods	18B3m	2750	48	13.6	5.6	5.3	7.0
rause	18B4m	2420	48	13.6	6.2	5.0	4.4
heffels	18B5m	2380	48	13.6	6.5	5.3	4.4
herman	18B7m	2440	48	13.6	4.6	4.0	3.8
heatridge	18B6m	2290	48	13.6	6.2	5.5	7.8
KANOGAN							
almon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7
rout Creek	3-M	3600	48	7.3	3.3	3.3	3.4*
AKIMA							
omery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4
ake Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6
ALLA WALLA							
ouse	17C3m	3650	48	11.1	6.0	6.2	5.9
elmers	17C2M	4400	48	12.0	7.7	8.2	7.3
ENATCHEE							
pper Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1

November 1 measurement

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept - Oct Average	FALL 1972 2/ Departure	WINTER Nov - 1972 - Feb - 1973 2/ Average	WINTER Departure
Columbia in Canada	4.15	+ 0.26	8.17	- 3.02
Pend Oreille - Spokane	2.68	- 1.20	11.20	- 4.28
Northeastern Washington	2.16	- 0.09	7.26	- 2.19
Southeastern Washington	2.35	- 0.30	8.59	- 1.75
Central Washington	3.48	- 0.96	18.05	- 5.63
North Central Washington	1.04	- 0.37	4.02	- 1.52
Northwest Slope Cascades	10.41	- 1.26	34.55	- 9.96
Southwest Slope Cascades	6.56	- 1.16	26.23	- 8.26

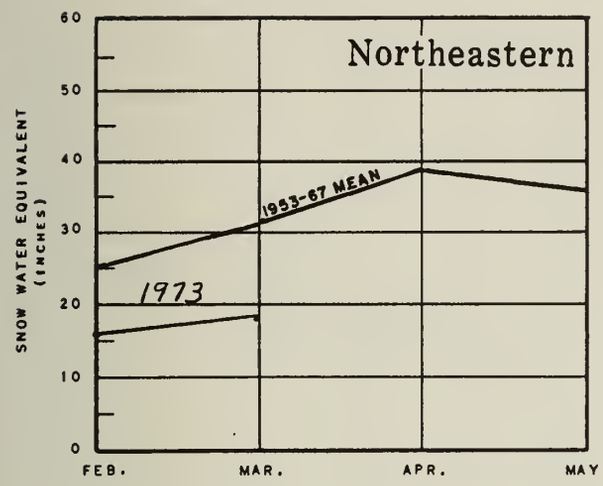
Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse drainages.
Central Washington	- Yakima, Wenatchee and Chelan drainages.
North Central Washington	- Methow and Okanogan drainages.
Northwest Slope Cascades	- Puget Sound drainages.
Southwest Slope Cascades	- Lower Columbia drainages.

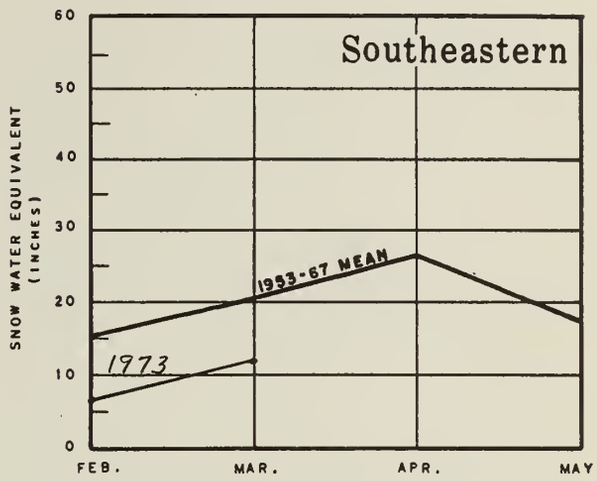
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

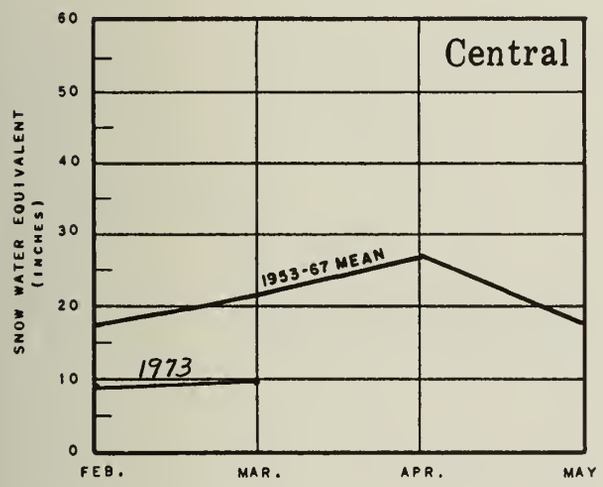
2/ - Departure from 15-year (1953-67) drainage division average.

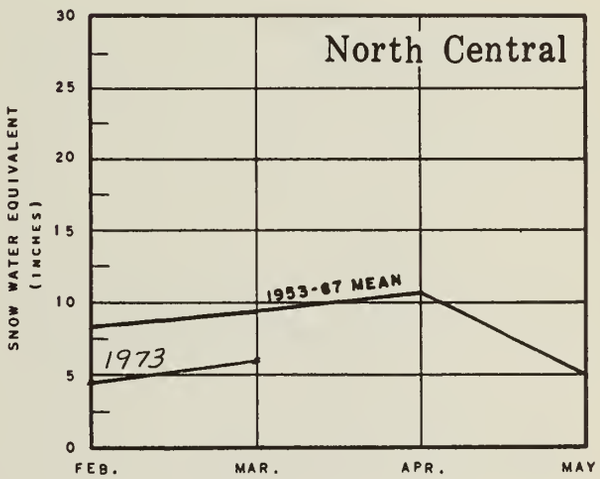
WASHINGTON SNOW COVER

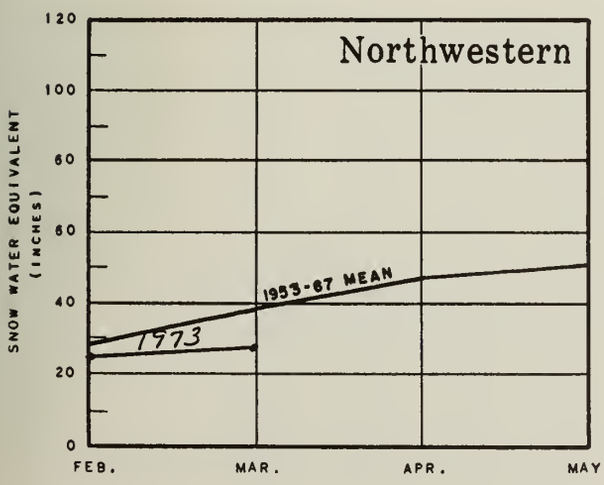
DRAINAGE AREAS

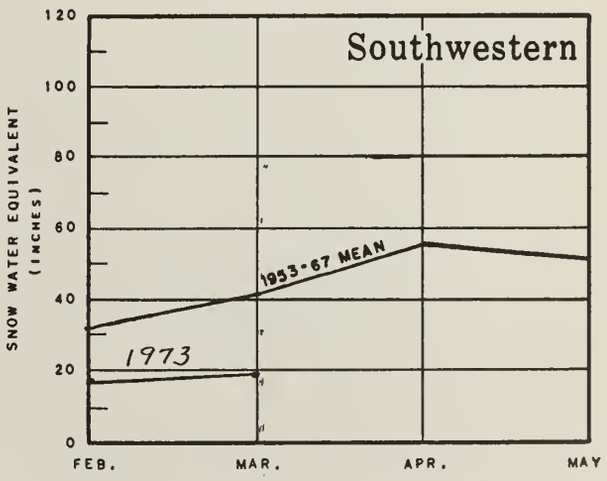








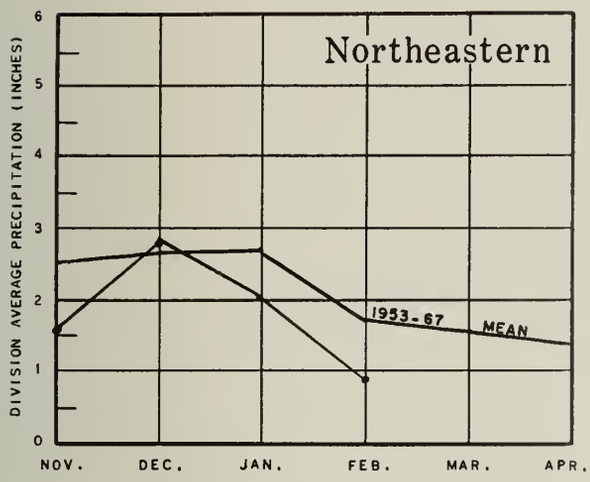


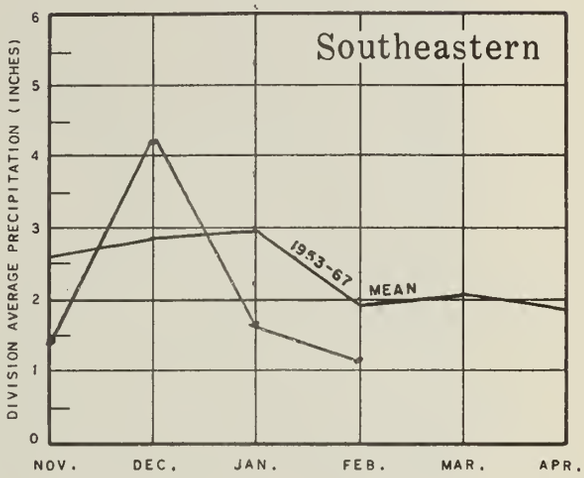


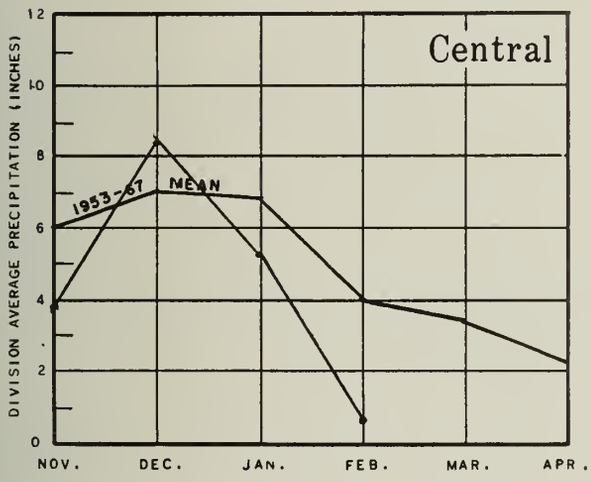
Selected Snow Survey Courses by Soil Conservation Service

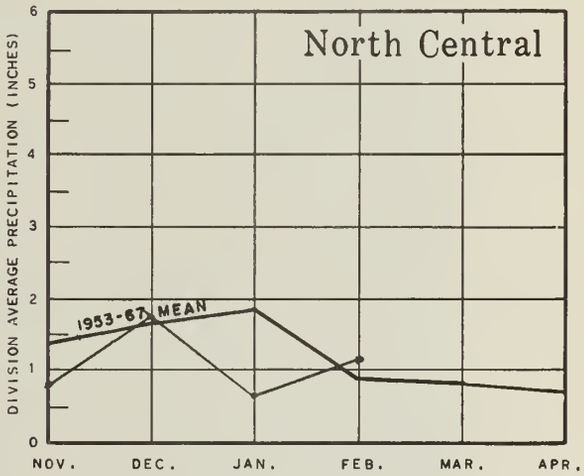
WASHINGTON VALLEY PRECIPITATION

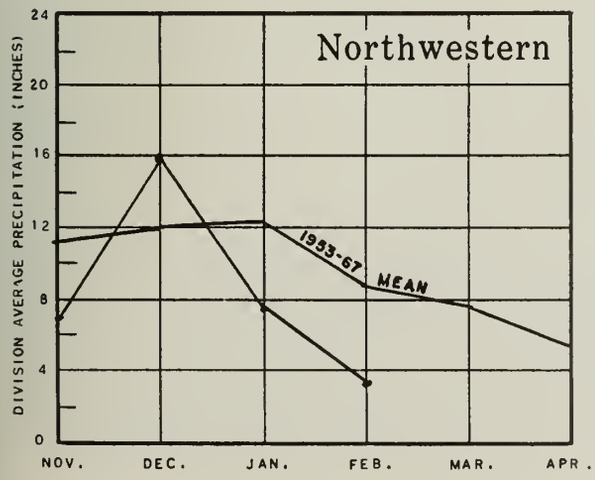
DRAINAGE AREAS

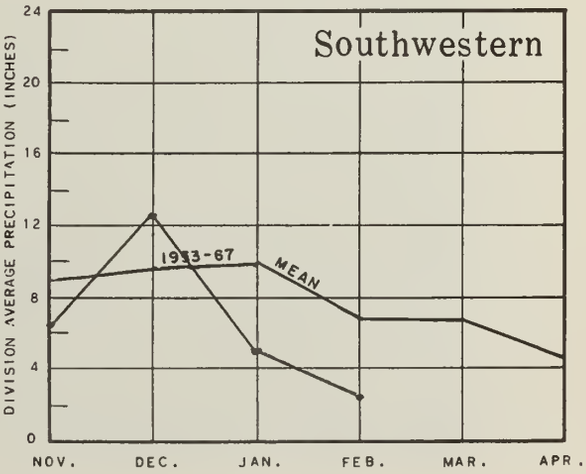












Preliminary Analysis by National Weather Service

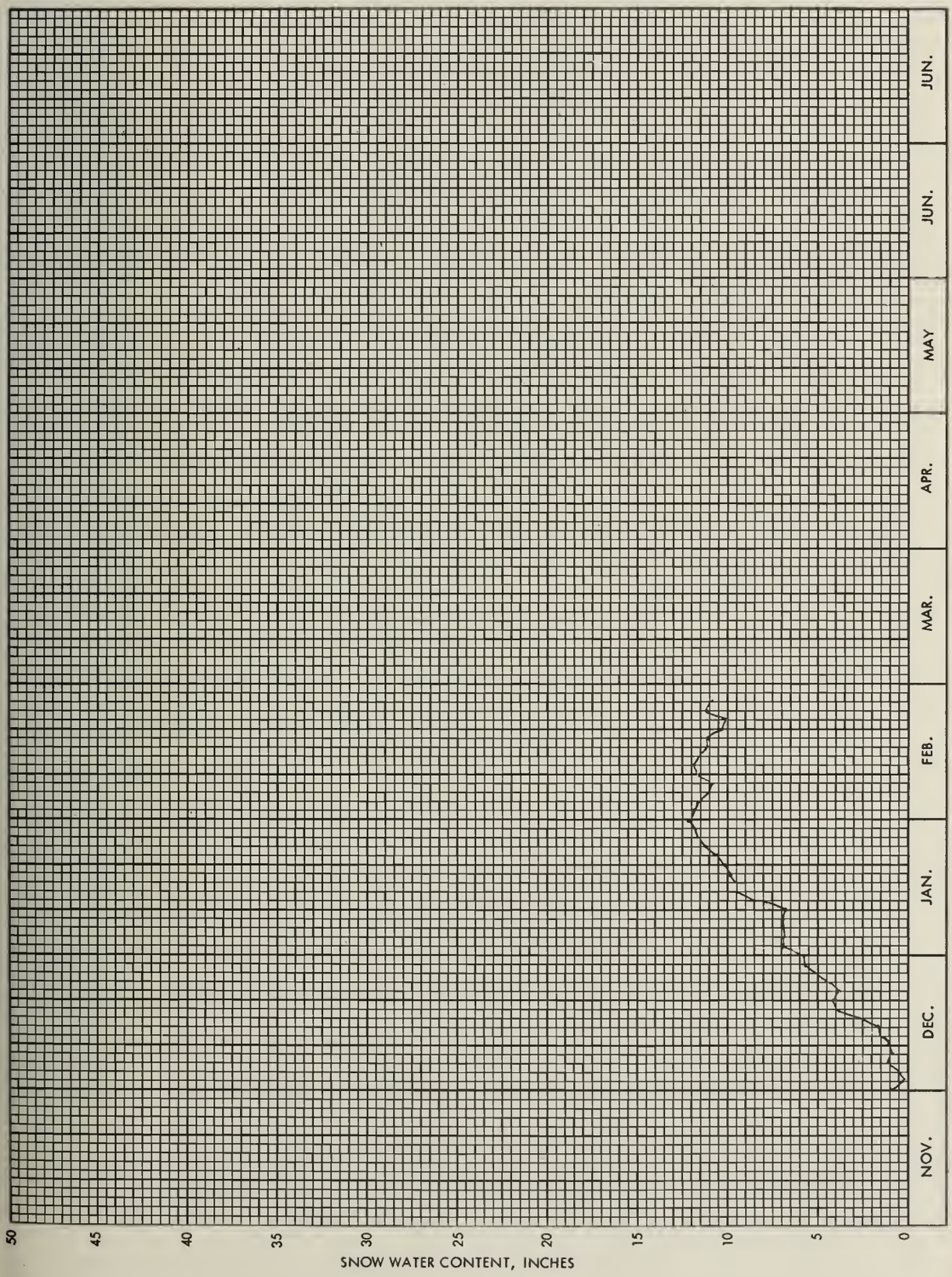
SNOW PILLOW DATA

1972 - 1973

Berne-Mill Creek

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42' Elev. 3240



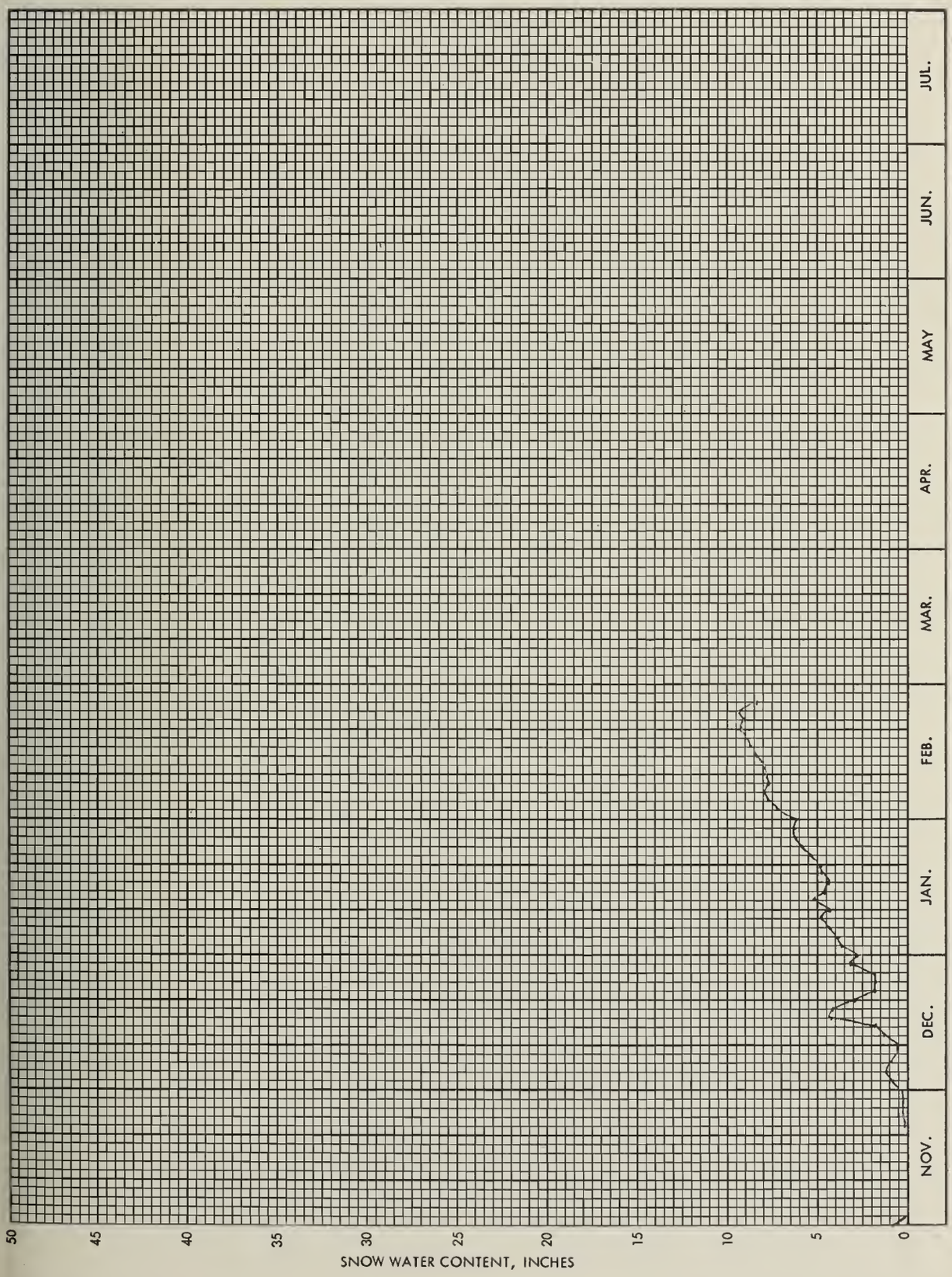
SNOW PILLOW DATA

1972 - 1973

Cougar Mountain - FS

Sec. 21 T. 21N R. 9E No. 21B423F Drainage: Green River

Lat. 47° 17' Long. 121° 40' Elev. 3200'



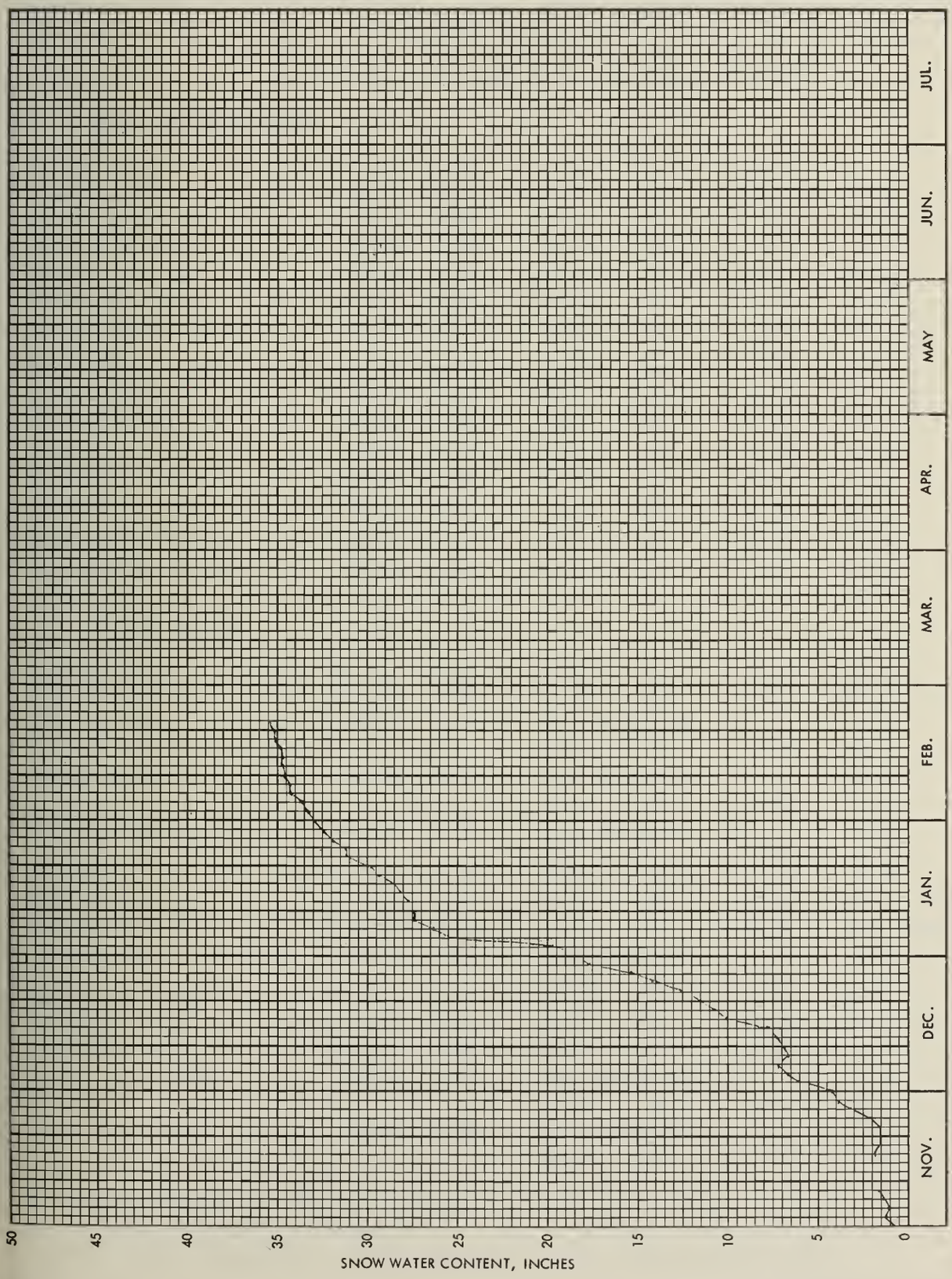
SNOW PILLOW DATA

1972 - 1973

Snowshoe Butte - FS

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Long. 121° 22' Elev. 5000'



WSFB-X4-L

SNOW DATA TO MARCH 1, 1973 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	3/2	84	29.7	64.5	43.5
Baree Midway	15B16	4600	3/1	59	19.9	53.9	33.8
Baree Trail	15B15	3800	3/1	4	1.6	17.4	8.2
Benton Meadow	16A02	2344	2/27	10	2.7	4.3	5.8
Benton Spring	16A03	4900	2/27	37	12.6	22.0	18.2
Boyer Mountain	17A02	5250	2/26	55	17.8	24.0	23.4
Brush Creek	14A04	5000	2/27	26	6.6	16.8	11.7
Chewelah	17A04	4923	2/24	37	10.2	12.4	16.5
Heart Lake Trail	14C10	4800	2/27	27	8.2	39.2	20.2
Hoodoo Basin	15C10	6000	2/27	86	31.5	68.6	45.6
Hoodoo Creek	15C01	5900	2/27	80	29.4	68.8	42.5
Lookout	15B02	5250	3/1	55	17.9	49.3	32.3
Mosquito Ridge +	16A04A	5100	2/23	67	24.2	43.2	33.8
Nelson	19-Can	3050	2/28	36	10.6	18.5	14.6*
Schweitzer Bowl	16A06	4500	2/27	60	21.2	37.0	----
Schweitzer Ridge	16A05	6100	2/27	90	32.0	49.7	----
Winchester Creek	17A03	2970	2/26	23	6.2	12.0	11.5
KETTLE RIVER							
Barnes Creek	90-Can	5300	2/26	35	13.8	23.9	18.4*
Big White Mtn.	154-Can	5500	2/28	48	14.0	20.0	17.3*
Boulder Road	18A02	1450	Not Measured			4.6	4.3
			2/26	6	2.2	5.7	3.5
Butte Creek	18A03	4070	Not Measured			8.6	8.1
			2/26	29	7.1	9.7	8.7
Cabin Creek	18A08	3170	Not Measured			8.2	7.5
			2/26	22	5.7	8.7	7.7
Carmi	126-Can	4100	2/28	16	3.8	9.0	6.3*
Farron # 1	17-Can	4000	2/28	36	11.4	13.2	12.4*
Farron # 2	243-Can	4000	2/28	35	10.2	New Course	
Goat Creek	18A04	3595	Not Measured			7.0	6.9
			2/26	20	4.9	7.0	6.6
Graystoke Lake	5-Can	5950	2/23	42	14.0	23.5	----
Monashee Pass	48A-Can	4500	2/26	35	10.3	17.4	13.7*
Old Glory Mtn.	42-Can	7000	2/26	57	14.1	32.2	24.8*
Snow Caps Creek	18A05	2150	Not Measured			5.2	4.6
			2/26	6	2.5	5.5	4.2
Snow Caps Trail	18A06	2720	Not Measured			7.2	6.1
			2/26	14	3.0	7.0	6.1

Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

SNOW DATA TO MARCH 1, 1973 - APPENDIX 2

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
Summit G. S.	18A07	4600	Not Measured			----	8.0
			2/26	27	6.0	----	8.3
Trapping Creek Lower	166-Can	3050	2/28	13	2.7	7.2	5.4*
Trapping Creek Upper	165-Can	4450	2/28	29	7.6	12.6	9.1*
COLVILLE RIVER							
Baird	17A06	3215	2/24	21	5.7	8.6	7.0
Carlson	18A09	2885	2/24	8	2.3	4.6	4.8
Chewelah	17A04	4925	2/24	37	10.2	12.4	16.5
Stranger Mountain	17A05	4990	2/24	34	8.9	10.8	12.4
Togo	18A10	3370	2/24	20	6.0	11.3	9.4
SPOKANE RIVER							
Above Burke	15B08	4100	3/1	29	8.7	29.2	----
Above Roland	15B07	4350	Not Measured				
Below Roland	15B06	3770	Not Measured				
Copper Ridge	16B02	4800	2/28	30	10.7	34.2	26.0
Forty-nine Meadows	15B03	5000	2/27	44	14.6	----	----
Fourth of July Summit	16B03	3100	2/27	6	1.9	13.2	----
Granite Peak	15B13A	6000	2/26	80	26.3	----	41.8
Kellogg Peak	16B05A	5560	Not Measured			42.5	----
Lookout	15B02	5250	3/1	55	17.9	49.3	32.3
Lost Lake	15B14A	6000	3/3	92	30.7	----	----
Lower Sands Creek	16B01	3400	2/28	24	7.1	21.1	17.8
Medicine Ridge	15B04A	6150	2/27	79	25.9	----	43.6
Mosquito Ridge +	16A04A	5110	2/23	67	24.2	43.2	33.8
Outlaw Creek	15B12A	3750	Not Measured			23.6	13.7
Roland Summit	15B05A	5200	Not Measured			54.7	34.6
Sherwin	16C01	3200	2/27	18	5.2	24.8	14.1
Sunset	15B09A	5600	Not Measured			52.6	29.9
OKANOGAN RIVER							
Aberdeen Lake	6-Can	4300	2/28	18	3.7	8.6	6.1*
Blackwall Peak	100-Can	6250	2/28	58	22.0	52.6	36.3*
Bouleau Creek	31-Can	5000	3/3	33	9.0	14.3	10.7*
Bouleau Lake	234-Can	4580	2/24	38	9.8	16.8	----
Brenda Mine	193-Can	4800	2/26	32	9.4	19.5	13.7*
Brookmere	27-Can	3200	2/26	19	4.5	13.0	9.2*
Carrs Landing Lower	167-Can	2250	2/24	6	0.9	4.8	2.0
Carrs Landing Upper	168-Can	3200	2/24	13	2.6	7.2	4.8*
Clark +	19A08a	7000	Not Measured			29.7	18.0

Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS-PORTLAND, OREGON 1973.

SNOW DATA TO MARCH 1, 1973 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Enderby	130-Can	6250	2/28	89	26.9	43.8	33.5*
Esperon Creek Lower	164-Can	4400	2/25	31	8.4	14.9	11.4*
Esperon Creek Middle	163-Can	4700	2/25	36	9.1	16.8	14.2*
Esperon Creek Upper	162-Can	5400	2/25	40	10.4	20.1	17.7*
Freezeout Meadows New	20A38	5000	2/28	56	19.9	77.2	----
Graystoke Lake	5-Can	5950	2/23	42	14.0	23.5	----
Hamilton Hill	107-Can	4900	2/27	33	9.7	26.6	14.4*
Harts Pass	20A05A	6500	2/24	79	29.3	62.6	38.5
Horseshoe Basin +	19A05a	7000	2/27	32	10.2	28.4	11.6
Isintok Lake	152-Can	5510	2/24	22	5.8	14.1	7.7*
Lost Horse Mountain	105-Can	6300	3/2	27	6.1	20.0	8.7*
Loup Loup	19A07	4650	2/28	23	6.6	12.0	8.9
McCulloch	4-Can	4200	2/25	21	4.3	9.0	6.3*
Missezula Mountain	106-Can	5100	Not Measured			----	8.8*
Mission Creek	5A-Can	6000	2/24	43	12.4	23.3	17.7*
Monashee Pass	48A-Can	4500	2/26	35	10.3	17.4	13.7*
Mount Kobau	156-Can	5950	3/1	30	7.5	15.3	12.6*
Muckamuck +	19A09a	6390	Not Measured			18.5	----
Mutton Creek No. 1	19A01	5700	2/27	36	9.5	21.8	12.3
Mutton Creek No. 2	19A04	6000	2/26	35	8.9	20.1	12.7
Mutton Creek No. 2 SP	19A11SP	6000	2/26	--	6.4	New Installation	
New Copper Mountain	46A-Can	4300	2/26	14	3.7	12.5	6.1*
New Penticton Res. #2	183-Can	5225	2/26	24	5.6	12.3	----
Nickel Plate Mtn.	47-Can	6200	2/27	19	4.8	13.1	7.2*
Oyama Lake	203-Can	4400	2/25	21	5.7	7.6	6.4*
Paysayten +	20A28a	4300	2/27	31	9.9	----	14.2
Postill Lake	55-Can	4500	2/27	24	5.0	9.9	7.5*
Quartette Lake	34-Can	4000	2/26	24	6.6	----	----
Rusty Creek	19A03	4000	2/27	18	4.6	10.2	7.0
Salmon Meadows	19A02	4500	2/26	28	6.8	13.4	9.7
Silver Star Mountain	99-Can	6050	2/25	58	19.0	32.6	24.1*
Starvation Mtn +	19A10a	6750	Not Measured			21.8	----
Summerland Reservoir	3A-Can	4200	2/25	23	6.0	15.0	8.9*
Touts Coulee	19A06	2845	2/27	7	2.2	6.1	3.7
Trout Creek	3-Can	4700	2/27	20	4.7	13.2	6.5*
Vaseux Creek	233-Can	4600	Not Measured			9.0	----
White Rocks Mountain	70-Can	6000	2/27	54	16.6	27.5	18.8*
METHOW RIVER							
Billy Goat Pass +	20A10a	6409	Out This Year			----	25.8
Dollar Watch +	20A29a	7000	2/27	55	17.6	41.4	23.7

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO MARCH 1, 1973 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
Harts Pass	20A05A	6500	2/24	79	29.3	62.6	38.5
Horseshoe Basin +	19A05a	7000	2/27	32	10.2	28.4	11.6
Loup Loup	19A07	4650	2/28	23	6.6	12.0	8.9
Mutton Creek No. 1	19A01	5700	2/27	36	9.5	21.8	12.3
Mutton Creek No. 2	19A04	6000	2/26	35	8.9	20.1	12.7
Mutton Creek No. 2 SP	19A11SP	6000	2/26	--	6.4	New Installation	
Rusty Creek	19A03	4000	2/27	18	4.6	10.2	7.0
Salmon Meadows	19A02	4500	2/26	28	6.8	13.4	9.7
War Creek Pass +	20A31a	6500	3/2	84	31.1	52.2	40.8
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	3/2	81	30.0	**	34.9
Greenwood Flat +	20A25a	3540	3/2	51	18.9	----	----
Little Meadows +	20A24a	5275	3/2	88	32.6	**	37.5
Lyman Lake	20A23A	5900	3/2	119	44.0	----	50.3
Park Creek Flat +	20A13a	2220	3/2	55	20.4	42.5	31.0
Park Creek Ridge	20A12A	4600	3/2	97	35.9	69.8	41.7
Petersons +	20A16a	3730	3/2	72	26.6	55.8	32.5
Rainy Pass	20A09	4780	2/24	75	27.4	58.4	37.0
Safety Harbor	20A30A	6300	3/2	60	22.2	**	27.2
War Creek Pass +	20A31a	6500	3/2	84	31.1	52.2	40.8
ENTIAT RIVER							
Entiat Meadows +	20A33a	4800	2/23	87	31.7	64.7	42.7
Entiat River Trail +	20A34a	3150	2/23	36	11.9	30.7	20.4
Four Mile Ridge +	20B27a	7000	2/23	57	20.7	----	----
Fox Camp +	20A36a	6510	2/23	104	37.9	79.0	50.7
Blue Creek G. S.	20B28a	5425	2/23	74	26.9	New Course	
Pope Ridge	20B20	4300	2/26	36	11.7	28.3	17.3
Pugh Ridge +	20A32a	6400	2/23	70	25.5	56.7	31.0
Shady Pass	20A37	5000	2/27	55	19.8	----	----
Snow Brushy +	20A35a	3850	2/23	71	25.8	49.1	35.9
Tommy Creek +	20B21a	5300	2/23	43	15.7	43.7	25.9
WENATCHEE RIVER							
Berne-Mill Creek	21B23	2925	2/15	44	15.0	36.3	24.0
			2/26	41	14.7	43.5	23.9
Berne-Mill Creek New SP	21B41SP	3240	2/26	34	11.7	33.0	21.7
Blewett Pass No. 2	20B02	4270	2/26	22	6.9	32.9	13.8
Chiwaukum G. S.	20B16	1810	2/15	19	4.5	19.4	10.5
			2/26	16	4.7	21.4	10.5

** Aerial Marker Buried
# Average based on 1953-67 average
* Average for years of record
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973-

SNOW DATA TO MARCH 1, 1973 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER (Cont.)							
Fish Lake	21B04	3371	2/24	47	17.8	55.2	31.7
Lake Wenatchee	20B05	1970	2/17	22	6.2	23.3	13.0
			2/26	18	6.2	26.8	13.4
Leavenworth R. S.	20B17	1127	2/12	8	3.1	10.8	4.3
			2/27	2	1.4	9.0	2.6
Lyman Lake	20A23A	5900	3/2	119	44.0	----	50.3
Merritt	20B18	2140	2/15	25	7.8	27.4	14.6
			2/26	23	7.8	30.6	13.7
Stevens Pass	21B01	4070	2/15	79	29.6	64.0	40.3
			2/26	76	29.6	77.3	44.4
Stevens Pass Sand Shed	21B45	3700	2/15	52	18.0	47.4	----
			2/26	47	18.3	55.0	----
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	2/28	16	5.8	14.0	6.5
Scout-A-Vista	20B04	3400	2/28	17	5.8	13.0	7.0
STEMILT CREEK							
Jump-Off	20B08	4450	2/27	21	7.2	15.8	6.8
Stemilt Slide	20B06	5000	2/28	31	10.6	24.1	12.6
Upper Wheeler	20B07	4400	2/28	15	6.6	21.0	8.5
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	2/27	28	9.5	24.0	----
Colockum Creek Lower	20B23	4300	2/27	20	6.2	16.2	----
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	2/23	13	3.2	11.8	5.9
Big Boulder Creek	21B09	3200	2/24	28	8.9	34.2	18.5
Blewett Pass No. 2	20B02	4270	2/26	22	6.9	32.9	13.8
Bumping Lake	21C08	3450	2/13	26	7.9	20.6	15.1
			2/28	22	7.7	20.4	15.3
Bumping Lake New	21C36	3400	2/13	32	9.6	26.2	17.9
			2/28	28	10.2	26.9	18.0
Cayuse Pass	21C06	5300	3/1	122	45.4	112.8	71.6
Colockum Pass	20B09	5370	2/28	37	9.9	21.6	14.9
Cooke Creek	20B10	4123	2/28	7	3.5	14.1	5.6
Corral Pass	21C13	6000	2/27	62	22.2	65.2	33.2
Fish Lake	21B04	3371	2/24	47	17.8	55.2	31.7
Green Lake	21C10	6000	2/23	56	19.7	45.8	25.7

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973.

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SNOW DATA TO MARCH 1, 1973 - APPENDIX 6

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
Grouse Camp	20B11	5385	Not Measured			24.9	16.1
High Creek	20B12	2930	2/26	9	3.7	13.6	5.1
Joe Lake +	21B46a	4624	2/22	75	27.8	----	----
Lake Cle Elum	21B14M	2200	Not Measured			22.0	8.5
			3/2	6	1.8	22.2	8.5
Lemah Creek +	21B47a	3327	2/22	60	22.2	65.5	----
Manashtash	20C01	3935	2/27	7	2.0	9.1	4.0
Morse Lake	21C17	5400	2/26	94	36.5	----	47.0
Nanum	21B39	2340	Not Measured			18.9	9.8
Olallie Meadows	21B02	3625	2/23	38	15.0	79.1	40.4
Satus Pass	20D01	4030	2/28	0	0.0	15.8	8.0
Stampede Pass SP	21B10	3860	2/15	--	19.0	53.0	34.8
			3/1	--	20.6	49.8	38.4
Trail Creek	20B14	3360	2/28	0	0.0	10.1	----
Tunnel Avenue	21B8	2450	2/15	34	10.2	31.3	20.2
			2/28	28	9.6	33.8	21.6
Van Epps Pass +	20B26a	5925	2/22	74	27.4	----	----
Walters Flat	20B15	3360	2/26	9	3.4	13.7	6.6
Waptus Lake +	21B49a	3024	2/22	57	21.1	69.3	----
White Pass (E. Side)	21C28	4500	2/14	32	9.3	46.4	21.5
			2/26	29	10.1	48.7	21.1
White Pass (L. Lake)	21C27	4500	Not Measured			----	22.6
			2/27	29	11.2	49.1	26.1
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	2/23	13	3.2	11.8	5.9
Green Lake	21C10	6000	2/23	56	19.7	45.8	25.7
L O W E R C O L U M B I A D R A I N A G E							
ASOTIN CREEK							
Spruce Springs	17C04	5700	2/27	36	11.0	32.7	----
MILL CREEK							
Homestead	17A01	4030	2/28	9	3.5	15.5	7.4
Martin Springs	17C02	4400	2/28	13	4.4	23.2	12.5
Tollgate	18D3M	5070	2/27	35	12.0	38.2	21.0
KLICKITAT RIVER							
Satus Pass	20D01	4030	2/28	0	0.0	15.8	8.0

\# Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973-

SNOW DATA TO MARCH 1, 1973 - APPENDIX 7

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	2/24	54	19.3	66.3	38.9
Surprise Lakes	21C13A	4250	2/24	49	19.5	37.3	42.0
WIND RIVER							
Old Man Pass	21D19	3100	2/24	17	5.2	31.0	15.8
LEWIS RIVER							
Blue Lake +	21C22a	4800	2/24	104	38.5	118.8	70.4
Bob's Trail	21C21	2200	2/24	12	3.3	28.8	12.4
Calamity Ridge +	21D1a	2500	2/24	1	0.3	17.5	----
Council Pass +	21C18a	4200	2/24	49	19.6	71.3	34.8
Cultus Creek	21C12	4000	2/24	54	19.3	66.3	38.9
Divide Meadow +	21C29a	5600	2/24	62	23.6	99.9	47.7
Grand Meadow	21C25	3500	2/24	27	9.5	44.0	22.9
Lone Pine Shelter	21C26	3800	2/27	44	15.9	60.4	31.4
Marble Mountain +	22C05a	3200	2/24	24	9.4	52.5	28.5
Mosquito Meadows	21C19	4100	2/27	46	16.7	62.0	34.4
New Muddy River	22C06	1400	2/24	0	0.0	16.1	9.6
Old Man Pass	21D19	3100	2/24	17	5.2	31.0	15.8
Plains of Abraham +	22C1a	4400	2/24	94	34.8	86.4	55.7
Smith Creek Road	22C04	2100	2/24	14	5.2	29.1	13.9
Spencer Meadow +	21C20a	3400	2/24	23	8.0	37.3	20.5
Surprise Lakes	21C13A	4250	2/24	49	19.5	85.0	42.0
Table Mountain +	21C24a	4200	2/24	60	22.8	70.4	40.6
Timbered Peak +	21D18a	3000	2/24	12	5.2	22.1	16.4
COWLITZ RIVER							
Cayuse Pass	21C06	5300	3/1	122	45.4	112.8	71.6
Mosquito Meadows	21C19	4100	2/27	46	16.7	62.0	34.4
Ohanapecosh	21C32	2200	2/27	5	3.0	28.6	14.8
Packwood Lake	21C31	2870	2/27	6	2.0	30.1	12.0
Pigtail Peak	21C33	5900	2/14	82	31.2	96.8	53.9
			2/27	85	33.0	94.3	52.7
Plains of Abraham +	22C01a	4400	2/24	94	34.8	86.4	55.7
Potato Hill	21C14	4500	2/27	39	14.0	57.8	25.7
White Pass (E. Side)	21C28	4500	2/14	32	9.3	46.4	21.5
			2/26	29	10.1	48.7	21.1
White Pass (L. Lake)	21C27	4500	Not Measured			----	22.6
			2/27	29	11.2	49.1	26.1
Willame Creek	21C30	3250	2/27	28	10.6	50.0	27.0

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

V684-SCS-PORTLAND, OREGON 1973

SNOW DATA TO MARCH 1, 1973 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average #
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	2/26	52	22.0	79.5	38.8
Longmire	21C03	2760	2/26	4	1.5	25.2	8.4
New Paradise Park	21C35	5500	2/26	94	38.4	105.0	57.9
Stem Glade	21C01	5050	2/26	88	36.1	105.9	59.4
WHITE RIVER							
Cayuse Pass	21C06	5300	3/1	122	45.4	112.8	71.6
Corral Pass	21C13	6000	2/27	62	22.2	65.2	33.2
Morse Lake	21C17	5400	2/26	94	36.5	----	47.0
GREEN RIVER							
Airstrip	21B24	1800	2/27	0	0.0	9.0	----
Charley Creek	21B25	1200	2/27	0	0.0	0.0	----
Cougar Mountain SP	21B42SP	3200	2/23	17	7.6	35.2	----
Grass Mtn. No. 2	21B27	2900	2/27	22	8.5	36.1	18.1
Grass Mtn. No. 3	21B28	2100	2/27	0	0.0	15.2	----
Lester Creek	21B29	3100	2/27	30	10.9	37.5	20.7
Lynn Lake	21B50	4000	2/27	12	4.2	47.6	----
Sawmill Ridge	21B29	4700	2/27	43	16.1	59.5	36.5
Snowshoe Butte SP	21B43SP	5000	2/23	71	29.0	95.0	----
Stampede Pass SP	21B10	3860	2/15	--	19.0	53.0	34.8
			3/1	--	20.6	49.8	38.4
Twin Camp	21B30	4100	2/27	31	11.7	36.2	24.9
CEDAR RIVER							
City Cabin	21B03	2390	2/27	11	4.2	30.2	14.8
Mt. Gardner	21B21	3300	2/26	4	1.5	31.5	15.4
Mt. Lindsay	21B16	2500	2/26	16	6.8	26.4	12.9
Mt. Washington New	21B50	3000	2/26	0	0.0	21.0	----
Rex River	21B17	2400	2/26	16	6.0	29.1	12.1
S. F. Cedar	21B06	3000	2/27	14	5.3	36.1	19.2
Tinkham Creek	21B20	3400	2/27	20	6.7	38.1	20.6
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	2/28	41	15.9	71.3	----
Lake Elizabeth	21B19	2900	2/28	33	12.8	60.6	33.1
Olallie Meadows	21B02	3625	2/23	38	15.0	79.1	40.4
S. F. Tolt	21B18	1900	2/28	0	0.0	6.8	----

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

SNOW DATA TO MARCH 1, 1973 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	2/28	33	12.8	60.6	33.1
Stevens Pass	21B01	4070	2/15	79	29.6	64.0	40.3
			2/26	76	29.6	77.3	44.4
Stevens Pass S. Shed	21B45	3700	2/15	52	18.0	47.4	----
			2/26	47	18.3	55.0	----
SKAGIT RIVER							
Beaver Creek Trail	21A06	2200	2/24	21	8.0	24.3	14.0
Beaver Pass	21A01	3680	2/24	48	16.7	48.8	29.3
Brown Top Ridge	21A28a	6000	2/24	109	43.2	93.6	----
Cloudy Pass	20A22a	6500	3/2	81	30.0	**	34.9
Devils Park	20A04	5900	2/24	81	30.5	68.6	39.1
Freezeout Cr. Trail	20A01	3500	2/28	25	8.6	24.2	12.6
Freezeout Meadows New	20A30	5000	2/28	56	19.9	77.2	----
Granite Creek	21A29	3500	2/24	34	11.6	32.4	----
Harts Pass	20A05A	6500	2/24	79	29.3	62.6	38.5
Hozomeen Lake	21A02	2600	2/28	11	4.2	15.5	9.0
Klesilkwa	35B-Can	3700	3/1	18	5.6	29.9	----
Lyman Lake +	20A23A	5900	3/2	119	44.0	----	50.3
Meadow Cabins	20A08	1900	3/1	5	2.5	17.1	7.2
New Hozomeen Lake	21A30	2800	2/28	18	7.0	20.5	----
New Tashme	26A-Can	2500	2/27	13	4.6	22.6	----
Quartette Lake	34-Can	4000	2/26	24	6.6	----	----
Rainy Pass	20A09	4780	2/24	75	27.4	58.4	37.0
Thunder Basin	20A07	4200	3/1	43	13.4	33.6	20.5
BAKER RIVER							
Baker Pass +	21A27a	4900	Not Measured			----	----
Dock Butte	21A11A	3800	2/13	100	47.0	----	----
			Not Measured			99.4	65.3
Easy Pass	21A07A	5200	2/13	86	41.0	----	----
			Not Measured			114.7	82.1
Jasper Pass	21A06A	5400	2/13	148	69.0	----	----
			Not Measured			125.5	87.3
Marten Lake	21A09A	3600	2/13	120	57.0	----	----
			Not Measured			114.3	73.3
Mount Blum +	21A18a	5800	2/13	106	50.0	----	----
			Not Measured			81.0	62.8
Panorama New	21A26	4300	3/1	118	48.7	95.3	----
Panorama SP	21A25SP	4300	Not Measured			----	----

Average based on 1953-67 average
** Aerial marker buried
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

SNOW DATA TO MARCH 1, 1973 - APPENDIX 10

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER (Cont.)							
Rocky Creek	21A12A	2100	2/13	36	17.0	----	----
			Not Measured			53.1	23.3
Schreibers Meadow	21A10A	3400	2/13	74	35.0	----	----
			Not Measured			79.2	58.1
S. F. Thunder Creek	21A14A	2200	2/13	10	5.0	----	----
			Not Measured			42.3	4.5
Watson Lakes	21A08A	4500	2/13	96	45.0	----	----
			Not Measured			97.2	61.3
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	3/2	78	30.4	**	----
Canyon +	21A20a	5100	3/2	129	50.3	**	----
Glacier Creek	21A23	3700	3/1	29	9.8	36.9	----
Panorama New	21A26	4300	2/15	114	44.7	77.5	----
			3/1	118	48.7	95.3	----
Panorama SP	21A25SP	4300	Not Measured			----	----
Twin Lakes +	21A21a	5200	3/2	146	56.9	**	----
O L Y M P I C P E N I N S U L A							
DUNGENESS RIVER							
Deer Park	23B04	5200	2/28	43	13.1	29.9	20.9
MORSE CREEK							
Cox Valley	23B14	4500	2/25	63	22.5	55.0	----
ELWHA RIVER							
Hurricane	23B03	4500	2/24	37	12.1	29.7	21.8
SKOKOMISH RIVER							
Black & White	23B07	4200	2/24	65	26.1	51.2	32.3
Black & White Lakes	23B06	4700	2/24	93	41.4	73.4	49.4
Four Streams	23B10	3000	2/24	35	12.9	38.9	----
Home Sweet Home	23B05	5200	2/24	112	46.7	99.7	64.2
Sundown Pass	23B08	3900	Not Measured			----	45.4
SOLEDUCK RIVER							
Deer Lake	23B01	3900	Not Measured				

** Aerial marker buried
# Average based on 1953-67 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ROOM 360, U.S. COURT HOUSE
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WATER SUPPLY OUTLOOK FOR WASHINGTON

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URBANA-CHAMPAIGN

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF
APR. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

USDA SCS-PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

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DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

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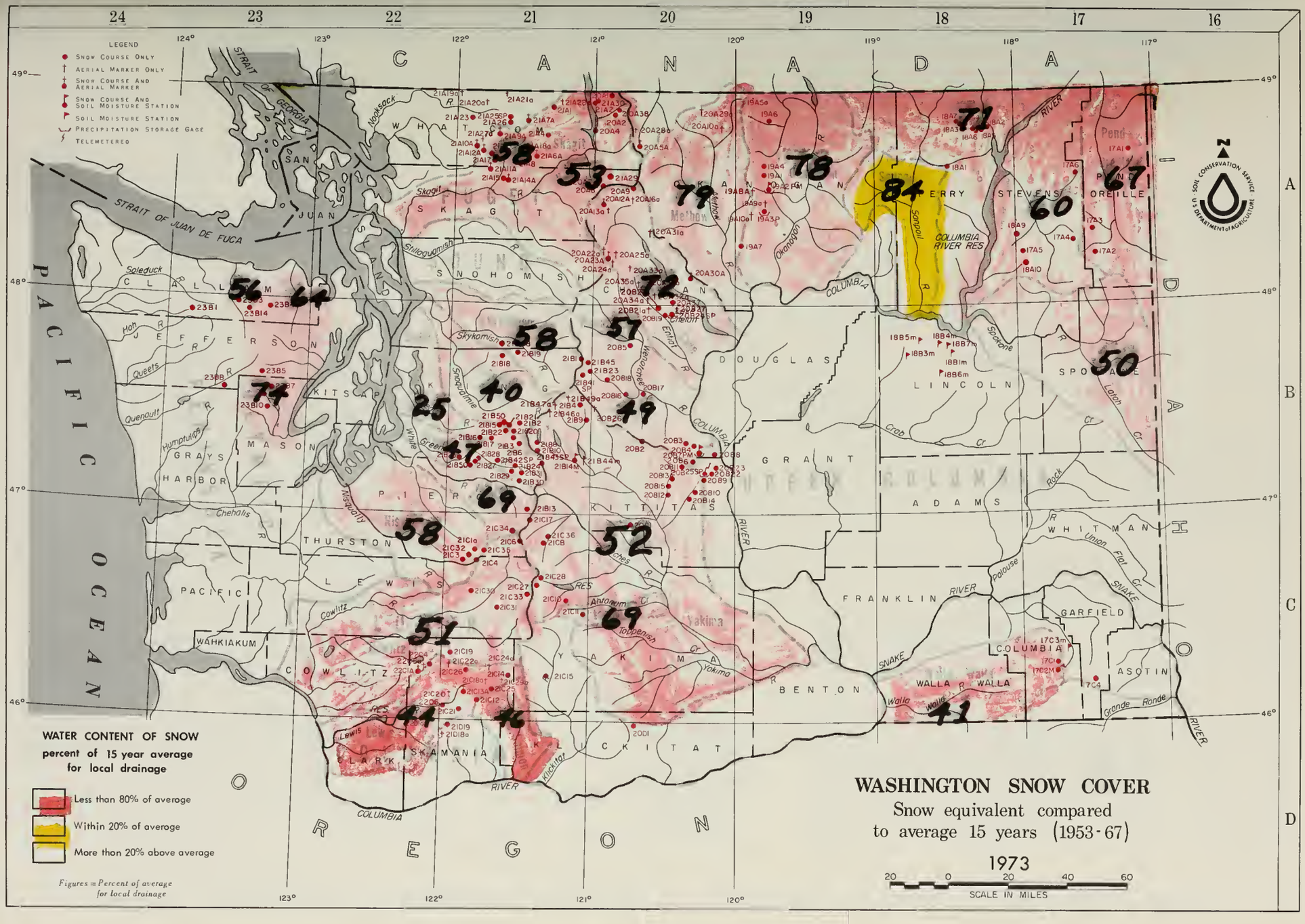

WASHINGTON SNOW COVER
Snow equivalent compared to average 15 years (1953-67)
1973
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
COLUMBIA RIVER RES
SOIL CONSERVATION SERVICE U.S. DEPARTMENT OF AGRICULTURE

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	S	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Brief	20819	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20827a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20820	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21823	7	26N	15E	2925
Berne-Mill Creek (New)	21841SP	13	26N	14E	3240
Blewett Pass No. 2	2082	3S	22N	17E	4270
Chiwaukum G. S.	20816	4	25N	17E	1810
Lake Wenatchee	2085	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20818	4	26N	16E	2140
Stevens Pass	2181	14	26N	13E	4070
Stevens Pass Sand Shed	21845	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20822	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	2084	18	21N	20E	3400
Stemilt Creek					
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	2087PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	1881m	32	27N	34E	2440
Jack Woods	1883m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	1885m	17	27N	32E	2378
Sherman	1887m	24	27N	33E	2440
Wheatridge	1886m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	2189	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	2089	25	20N	20E	5370
Cooke Creek	20810	17	19N	20E	4123
Domery Flat	21844m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20811	29	21N	19E	5385
High Creek	20812	34	20N	19E	2930
Joe Lake	21846a	22	23N	12E	4624
Lake Cle Elum	21814M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	2188	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21849a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21018a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C3S	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21824	1B	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21827	14	20N	8E	2900
Grass Mountain No. 3	2182B	12	20N	8E	2100
Lester Creek	21829	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	2183	10	21N	10E	2390
Mt. Gardner	21821	30	22N	10E	3300
Mt. Gardner Aux.	21822	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	2186	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21848	31	27N	9E	3500
Ollallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A1Ba	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

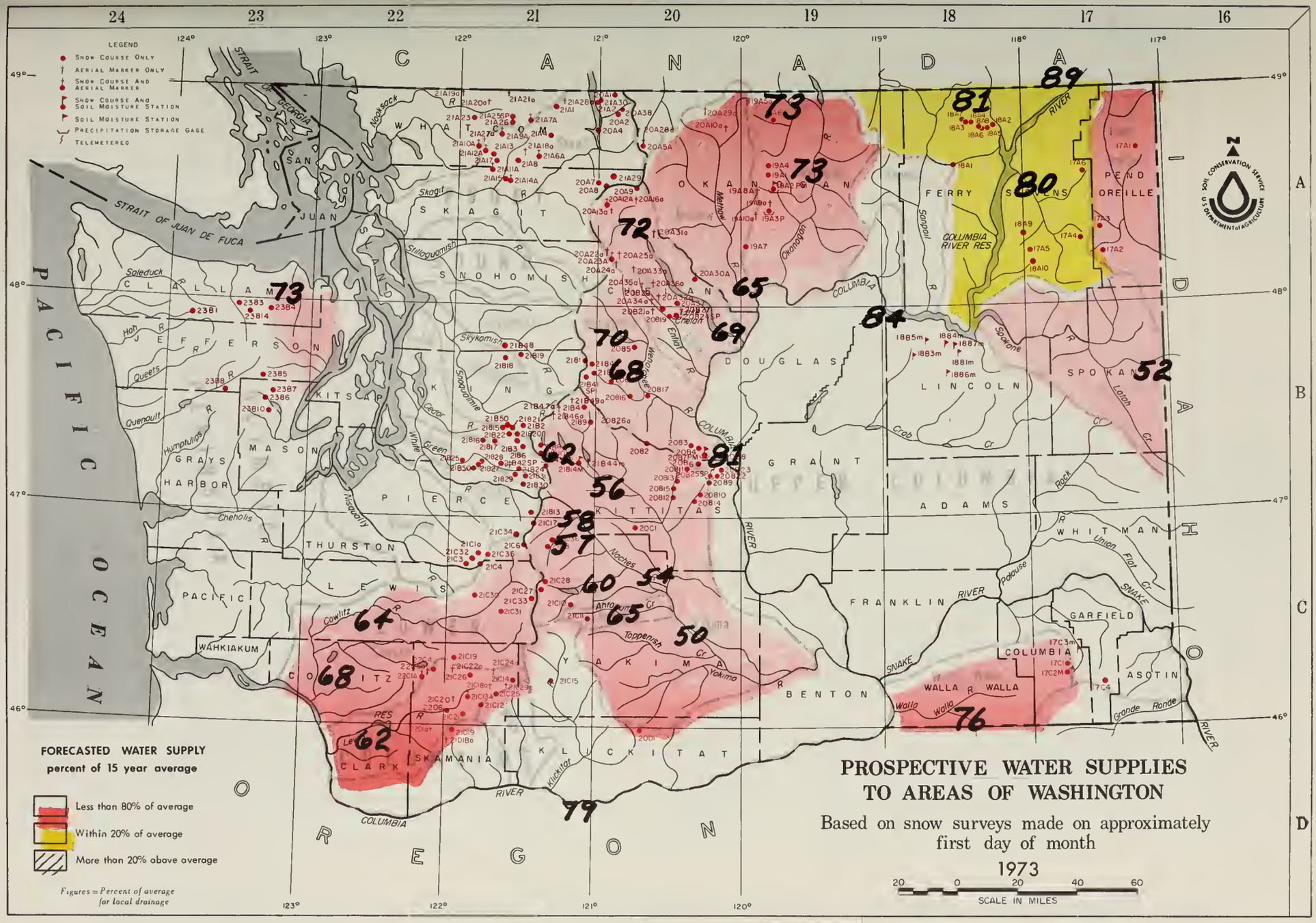
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	2384	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	
Elwha River					
Hurricane	2383	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1973
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
BENTON
FRANKLIN
GRANT
DOUGLAS
OKANOGAN
FERRY
STEVENS
PEND OREILLE
LINCOLN
SPOKANE
ADAMS
WHITMAN
GARFIELD
COLUMBIA
WALLA WALLA
ASOTIN
COLUMBIA RIVER RES
COLUMBIA RIVER
SNAKE RIVER
Nooksack
Skagit
Stillaguamish
Snohomish
Skykomish
Snoqualmie
Cedar
White
Green
Nisqually
Cowlitz
Lewis RES
Cheholis
Chehalis
Soleduck
Hoh
Queets
Quinault
Humptulips
Nooksack
Methow
Okanogan
Similkameen
Entiat
Chelan
Sanpoil
Spokane
Crab Cr
Rock
Union Flat Cr
Pedouse
Latah Cr
Grande Ronde
Walla Walla
Yakima
Toppenish Cr
Ahtanum Cr
Naches
Klickitat
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Billy Goat Pass	20A10a	10	3BN	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	2BN	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Park	23B4	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23B14	29	28N	6W	

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	2383	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Black and White	2387	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900

Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
April 1, 1973

* *
* The water supply situation in the northern Columbia Basin in *
* Canada has improved from that which was reported last month. This *
* improvement has extended to the west through the Kettle drainage *
* and ran out in the Okanogan-Similkameen. The situation in these *
* two watersheds is the same as last month. The rest of the water- *
* sheds in Washington and tributary basins all have a worsening *
* water supply outlook. Comparing snow cover as of April 1 with *
* March 1, the general trend is for a lower percentage than re- *
* ported last month, with some exceptions. These exceptions are *
* minor. The snow pack, as of April 1, ranges from a high of 84% *
* of normal for the Sanpoil River, measured by one snow course, to *
* a low of 25% of normal for the Cedar, measured by five snow *
* courses. Precipitation, as reported by the Weather Bureau, ranges *
* from 34% of normal in central Washington to a high of 103% of *
* normal for the Columbia in Canada. Runoff during the month gen- *
* erally ranged below normal, with only the flow at Birchbank *
* having above normal runoff. Of the indicator stations used for *
* comparison, the Palouse at Hooper had the lowest runoff at 41%. *
* The result of this situation is a general decrease in water *
* supply forecasts for all streams except the mainstream of the *
* Columbia. *
* *

SNOW COVER

The snow pack continues to be the lowest in the state of Washington since the dry year of 1963. The situation was more critical in that year, but things could deteriorate further with subnormal rainfall this spring, as well as above normal temperatures. The snow cover in the northeast ranges from 84% of normal for the Sanpoil River to 50% for the Spokane. The Sanpoil drainage is measured by only one snow course and this measurement might not be indicative of the overall area. In the Okanogan-Methow area, the snow pack is now 78% of average and 52% of last year. The Chelan-Wenatchee area has a snow pack that ranges from 49 to 72% of average and 30 to 45% of last year. In the Yakima drainage, the snow cover measured by 19 snow courses is only 52% of average and 36% of last year. The Lower Columbia has even less snow than Yakima, ranging from 41 to 51% of average. The real dry watershed in the state is the Cedar River. This drainage has five snow courses with measurable amounts of snow and these courses were only 25% of average and 17% of what occurred last year at this time. The Puget Sound drainage ranges from this low of 25% to a high of 69% for the White River. On the Olympic Peninsula, the snow cover ranges from 46% of normal in the Elwha drainage to 74% for the Skokomish.

RESERVOIRS

The power reservoirs in the Columbia drainage of Washington have considerably less than normal amounts of water in storage as of April 1. The irrigation reservoirs all have considerably more. The only reservoir not following this trend is the Ross Reservoir on the Skagit River. With careful management and normal to above precipitation, irrigation reservoirs will have adequate water. Power reservoirs will have to be managed very carefully to insure adequate power. This situation is now taking place with the cutting of interruptable power by Bonneville Power Administration.

PRECIPITATION

As reported by the National Weather Service, rainfall in March ranged from 34% of normal for the central Washington drainage division to 3% above normal for the Columbia in Canada. The November through March winter period for precipitation ranges from 70% of normal for the central Washington area to 81% for the Southeastern drainage division.

STREAMFLOW

The streams, except the Columbia at Birchbank, reported below normal streamflow during March. Forecasts of water supply outlook can be found in the following tabulation and range from a low of 50% of normal for the Yakima River at Parker to a high of 89% of normal for the Columbia at Birchbank. This is an increase of 4% for Birchbank and a decrease of 8% for the Yakima.

STREAMFLOW FORECASTS - APRIL 1973

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1972 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
			COLUMBIA BASIN				
Columbia River System							
Columbia River	41360	89	Apr-Sep	52590	48592	34490	46368
at Birchbank 1/	32300	86	Apr-Jul	42700	39462	27840	37480
	22600	84	Apr-Jun	31000	29759	20890	27040
Columbia River	58500	84	Apr-Sep	83880	75360	54617	69458
at Grand Coulee 1/	49200	84	Apr-Jul	71820	64444	46563	58899
	36500	80	Apr-Jun	56200	51550	37574	45889
Columbia River bl.	61900	81	Apr-Sep	98040	84965	58544	76241
Rock Island Dam 1/	50600	78	Apr-Jul	84520	73096	50236	64777
	38500	76	Apr-Jun	66100	58235	40675	50387
Columbia River at	82800	79	Apr-Sep	134620	123427	88146	105176
The Dalles, OR 1/	68600	76	Apr-Jul	117810	107702	76054	90050
	54100	75	Apr-Jun	96290	88936	62847	72410
Pend Oreille River System							
Pend Oreille River	10900	68	Apr-Sep			14737	16030
bl. Box Canyon	9950	67	Apr-Jul			13676	14788
	8290	65	Apr-Jun			11985	12754
Kettle River System							
Kettle River	1550	81	Apr-Sep		2240	1099	1918
nr. Laurier	1550	82	Apr-Jul		2177	1068	1821
	1320	80	Apr-Jun		1927	1004	1644
Colville River							
at Kettle Falls	122	80	Apr-Sep		170	94	153
	113	80	Apr-Jul		158	86	141
	105	80	Apr-Jun		146	80	131

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Streamflow Forecasts - April 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Spokane River System*							
Spokane River at	1650	52	Apr-Sep	3971		2514	3151
Post Falls ID 2/	1580	52	Apr-Jul			2418	3055
	1520	52	Apr-Jun			2274	2913
Okanogan River System							
Similkameen River	1110	73	Apr-Sep	3162	1931	850	1525
nr. Nighthawk	1035	73	Apr-Jul	2998	1840	808	1419
	877	73	Apr-Jun	2505	1576	739	1197
Okanogan River	1270	73	Apr-Sep	3824	2225	923	1738
nr. Tonasket	1100	70	Apr-Jul	3481	2077	864	1578
	925	70	Apr-Jun	2846	1772	785	1318
Methow River System							
Methow River	680	65	Apr-Sep	--	1339	622	1054
nr. Pateros	660	67	Apr-Jul	--	1259	587	981
	565	68	Apr-Jun	--	1061	532	834
Chelan River System							
Chelan River	875	69	Apr-Sep	1965	1550	905	1266
at Chelan 3/	780	70	Apr-Jul	1717	1352	816	1119
	625	72	Apr-Jun	1309	1019	683	870
Stehekin River	650	72	Apr-Sep	--	1093	678	904
at Stehekin	570	74	Apr-Jul	--	927	589	772
	430	73	Apr-Jun	--	657	478	586
Entiat River	170	--	Apr-Sep		310	160	--
nr. Ardenvoir	155	--	Apr-Jul		280	148	--
	130	--	Apr-Jun		209	129	--
Wenatchee River System							
Wenatchee River	930	70	Apr-Sep	--	1637	1019	1333
at Plain	875	73	Apr-Jul	--	1448	941	1204
	700	74	Apr-Jun	--	1045	804	952
Wenatchee River	1230	68	Apr-Sep	2808	2241	1416	1814
at Peshastin	1160	70	Apr-Jul	2481	1999	1318	1651
	1000	76	Apr-Jun	1891	1454	1132	1316
Stemilt Basin nr. Wenatchee	110*	84	May-Sep	145*	148*	123*	131*

* Forecasts made of Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

** Thousands of Miners' inches.

Streamflow Forecasts - April 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	1953-67
Yakima River System							
Yakima River nr. Martin 4/	90	62	Apr-Sep	213	192	131	145
	80	60	Apr-Jul	192	179	123	134
	75	65	Apr-Jun	160	139	114	116
Yakima River at Cle Elum 5/	540	56	Apr-Sep		1300	866	968
	500	56	Apr-Jul		1179	803	885
	450	59	Apr-Jun		934	723	762
Yakima River nr. Parker 6/	870	50	Apr-Sep		2873	1491	1738
	900	52	Apr-Jul		2620	1512	1722
	825	52	Apr-Jun		2153	1461	1583
Kachess River nr. Easton 7/	66	52	Apr-Sep	196	172	115	128
	62	51	Apr-Jul	182	163	112	122
	60	56	Apr-Jun	153	130	104	107
Cle Elum River nr. Roslyn 8/	235	59	Apr-Sep	750	627	435	485
	265	60	Apr-Jul	673	568	402	445
	230	62	Apr-Jun	538	433	350	373
Bumping River nr. Nile 9/	85	57	Apr-Sep	234	193	129	150
	78	56	Apr-Jul	209	174	122	138
	70	61	Apr-Jun	156	124	107	114
American River nr. Nile	75	58	Apr-Sep		172	128	129
	70	58	Apr-Jul		154	120	120
	63	64	Apr-Jun		113	106	99
Tieton River at Tieton Dam 10/	150	60	Apr-Sep	396	326	244	251
	125	58	Apr-Jul	338	272	207	215
	102	59	Apr-Jun	261	198	172	172
Naches River nr. Naches 11/	485	54	Apr-Sep		1140	841	899
	440	54	Apr-Jul		1039	779	819
	390	56	Apr-Jun		823	694	698

4/ Observed flow corrected for storage in Lake Keechelus.
5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
7/ Observed flow corrected for storage in Lake Kachess.
8/ Observed flow corrected for storage in Lake Cle Elum.
9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.

Streamflow Forecasts - April 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Fore-cast Period	1972	1971	1970	15-Yr. Average 1953-67
Yakima River System (Cont.)							
Ahtanum Creeks	32	65	Apr-Sep		63	43	49
nr. Tampico 12/	29	64	Apr-Jul		57	39	45
	26	65	Apr-Jun		48	35	40
Lower Columbia River System							
Mill Creek	22	76	Apr-Sep		30	27	29
nr. Walla Walla	19	76	Apr-Jul		26	23	25
	16	70	Apr-Jun		24	21	23
Lewis River							
at Ariel 13/	850	62	Apr-Sep		1827	914	1358
	710	59	Apr-Jul		1605	798	1197
	640	60	Apr-Jun		1341	723	1059
Cowlitz River blw.	1380	64	Apr-Sep		2800	1615	2160
Mayfield Dam	1180	62	Apr-Jul		2463	1425	1908
	1015	63	Apr-Jun		1935	1245	1612
Cowlitz River							
at Castle Rock 14/	1920	68	Apr-Sep		3710	2134	2818
	1660	67	Apr-Jul		3253	1873	2487
	1450	68	Apr-Jun		2585	1652	2119
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	125	73	Apr-Sep		196	136	172
nr. Sequim	105	74	Apr-Jul		154	115	141
	79	75	Apr-Jun		105	89	105

12/ Observed flow of North and South Forks (combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about April 1, 1973, as percent of the same date in 1972 and 1971 and average of record.

Tributary Basin	No. of Courses Average	1973 Snow Water Expressed as percent of 1972	1971	1953-67
		UPPER COLUMBIA BASIN		
Pend Oreille	15	64	56	67
Kettle	12	56	61	71
Colville	4	109	44	60
Spokane	15	36	39	50
Sanpoil	1	101	82	84
Okanogan	38	54	61	78
Methow	9	52	56	79
Chelan	5	45	51	72
Entiat	9	43	46	57
Wenatchee	9	30	32	49
Yakima	19	36	33	52
Ahtanum	2	42	--	69
		LOWER COLUMBIA		
Mill Creek	3	34	35	41
White Salmon	2	32	28	46
Lewis	14	34	27	44
Cowlitz	8	36	34	51
		PUGET SOUND		
Nisqually	3	35	41	58
White	3	51	46	69
Green	8	35	32	47
Cedar	5	17	17	25
Snoqualmie	3	31	27	40
Skykomish	5	36	39	58
Skagit	16	38	38	53
Baker	8	47	44	58
Nooksack	5	49	62	--
		OLYMPIC PENINSULA		
Skokomish	4	62	45	74
Elwha	1	55	41	56
Dungeness	1	60	48	64

RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (April) 1973	1972	1971	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	83.9	335.2	137.9	164.0
Columbia	Franklin D. Roosevelt Lake	5232.0	1546.3	1242.4	1534.2	2359.6
Columbia	Banks Lake	761.8	592.0	680.2	674.8	499.3
Okanogan	Conconully Reservoir	13.0	11.8	10.8	6.1	6.7
Okanogan	Salmon Lake	10.5	9.5	8.6	2.1	8.5
Chelan	Lake Chelan	676.1	121.4	199.5	179.9	169.0
		YAKIMA				
Yakima	Keechelus Lake	157.8	112.1	127.5	122.4	102.8
Kaches	Kachess Lake	239.0	196.8	215.3	190.7	184.4
Cle Elum	Lake Cle Elum	436.9	340.5	326.9	251.8	278.8
Bumping	Bumping Lake	33.7	11.7	9.1	3.3	14.0
Tieton	Rimrock Lake	198.0	160.8	145.1	139.6	135.8
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	734.2	833.0	757.2	715.2
Skagit	Diablo Reservoir	90.6	87.5	87.8	84.3	85.5
Skagit	Gorge Reservoir	9.8	8.4	7.8	8.3	-

1/ Based on Active Storage
* 15-year average 1953-67

SOIL MOISTURE - APRIL

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches) Total Capacity	Soil Moisture Content (Inches as of Apr. 1) 1973	1972	1971
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	9.7	9.6	10.1
Krause	18B4m	2420	48	13.6	8.8	9.2	9.3
Sheffels	18B5m	2380	48	13.6	9.8	9.7	9.1
Sherman	18B7m	2440	48	13.6	7.9	9.0	8.9
Wheatridge	18B6m	2290	48	13.6	8.5	10.4	10.4
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	3.0	3.7	3.6
Trout Creek	3-M	3600	48	7.3	3.7	5.6	3.8
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	6.1	--	4.9
Lake Cle Elum	21B14M	2200	48	12.8	9.2	--	9.2
WALLA WALLA							
Couse	17C3m	3650	48	11.1	9.4	10.5	10.6
Helmers	17C2M	4400	48	12.0	8.3	10.6	11.0
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	11.4	12.4	10.2

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches) Total Capacity	Soil Moisture Content (Inches) as of Oct. 1 1972	1971	1970
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	5.6	5.3	7.0
Krause	18B4m	2420	48	13.6	6.2	5.0	4.4
Sheffels	18B5m	2380	48	13.6	6.5	5.3	4.4
Sherman	18B7m	2440	48	13.6	4.6	4.0	3.8
Wheatridge	18B6m	2290	48	13.6	6.2	5.5	7.8
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7
Trout Creek	3-M	3600	48	7.3	3.3	3.3	3.4*
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4
Lake Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6
WALLA WALLA							
Couse	17C3m	3650	48	11.1	6.0	6.2	5.9
Helmers	17C2M	4400	48	12.0	7.7	8.2	7.3
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1

* November 1 measurement

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct 1972 Observed	FALL Sept-Oct 1972 2/ Departure	WINTER Nov - 1972 Observed	WINTER Mar - 1973 2/ Departure
Columbia in Canada	4.15	+ 0.26	9.74	- 2.95
Pend Oreille - Spokane	2.68	- 1.20	13.23	- 5.02
Northeastern Washington	2.16	- 0.09	8.58	- 2.51
Southeastern Washington	2.35	- 0.30	10.01	- 2.40
Central Washington	3.48	- 0.96	18.98	- 8.15
North Central Washington	1.04	- 0.37	4.70	- 1.64
Northwest Slope Cascades	10.41	- 1.26	39.43	-12.71
Southwest Slope Cascades	6.56	- 1.16	29.75	-11.12

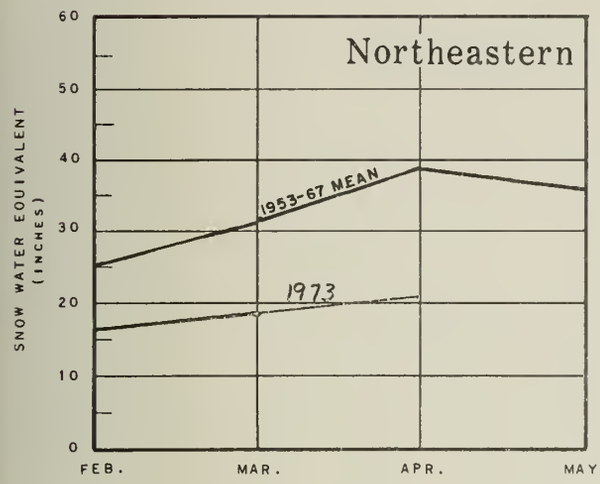
Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse drainages.
Central Washington	- Yakima, Wenatchee and Chelan drainages.
North Central Washington	- Methow and Okanogan drainages.
Northwest Slope Cascades	- Puget Sound drainages.
Southwest Slope Cascades	- Lower Columbia drainages.

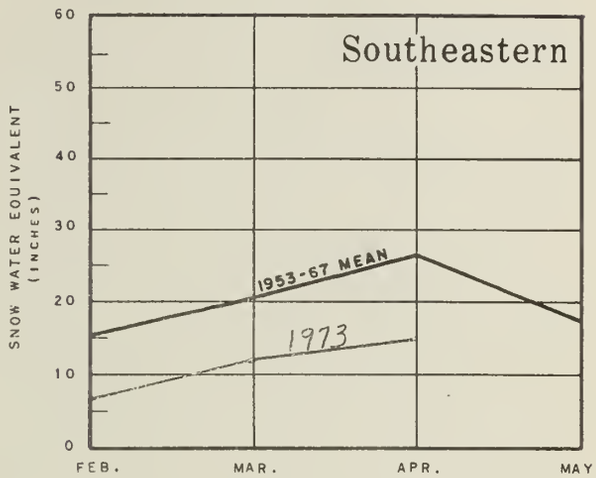
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

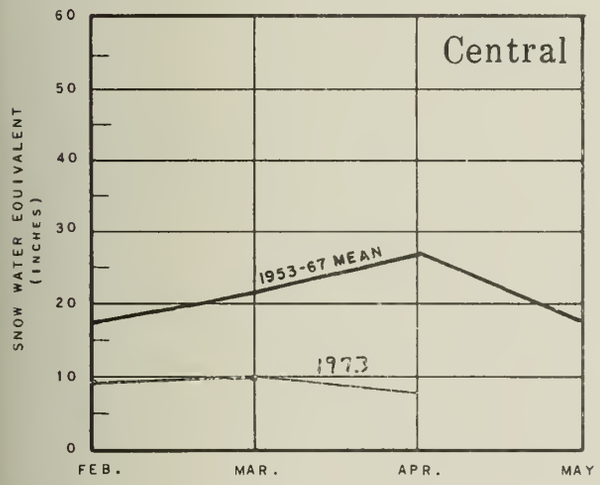
2/ - Departure from 15-year (1953-67) drainage division average.

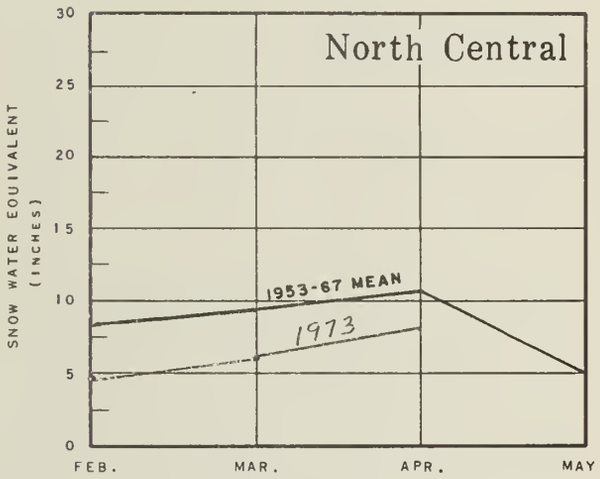
WASHINGTON SNOW COVER

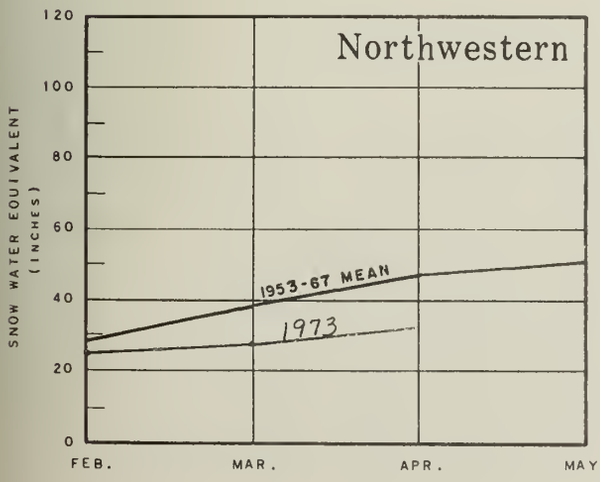
DRAINAGE AREAS

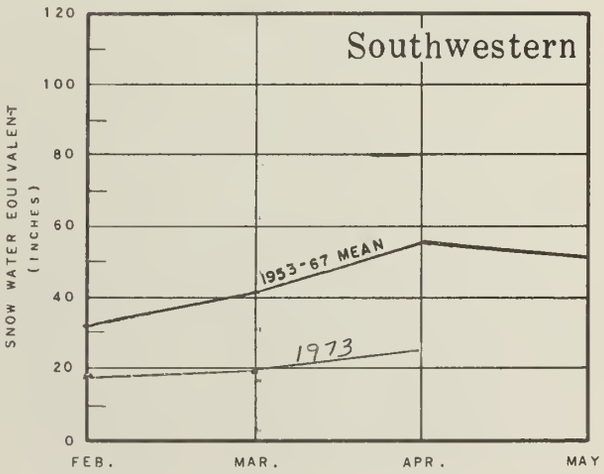








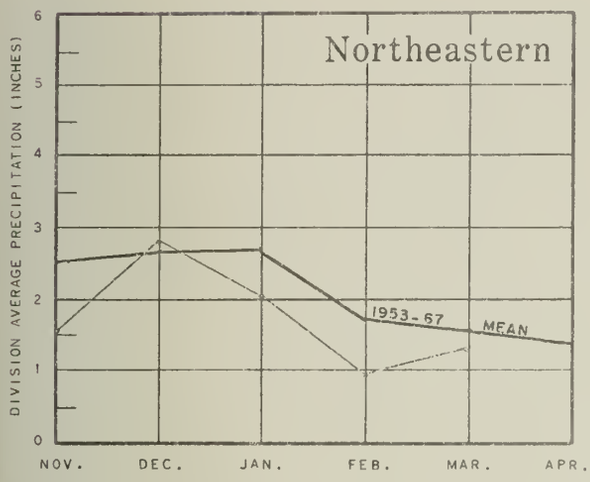


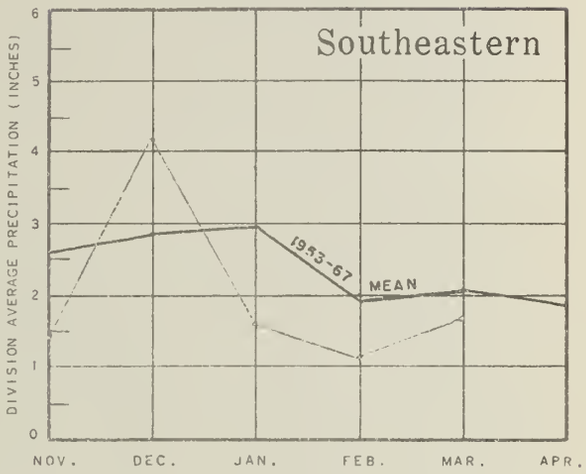


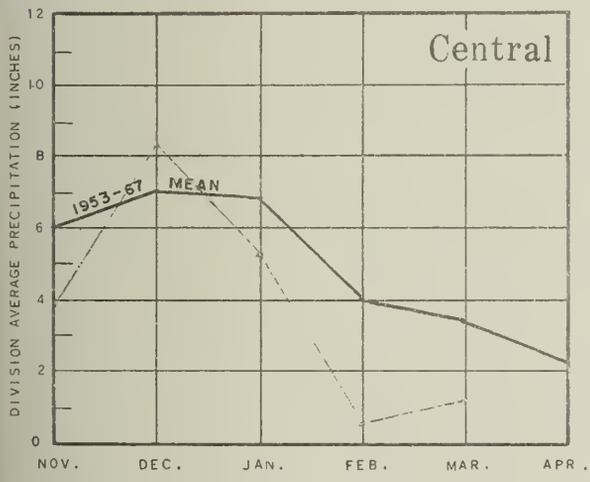
Selected Snow Survey Courses by Soil Conservation Service

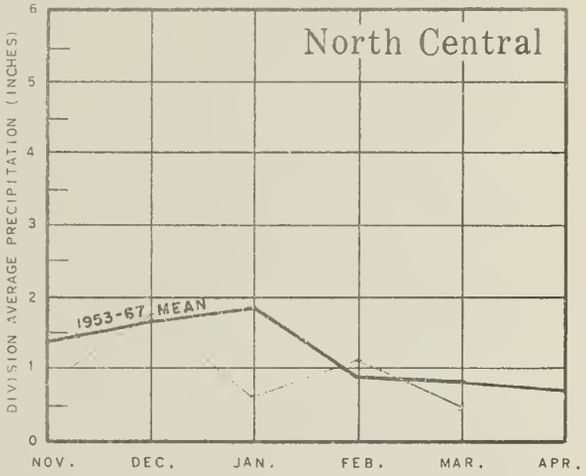
WASHINGTON VALLEY PRECIPITATION

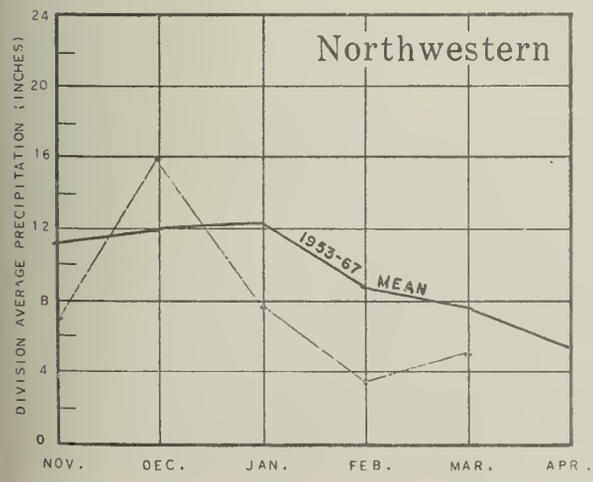
DRAINAGE AREAS

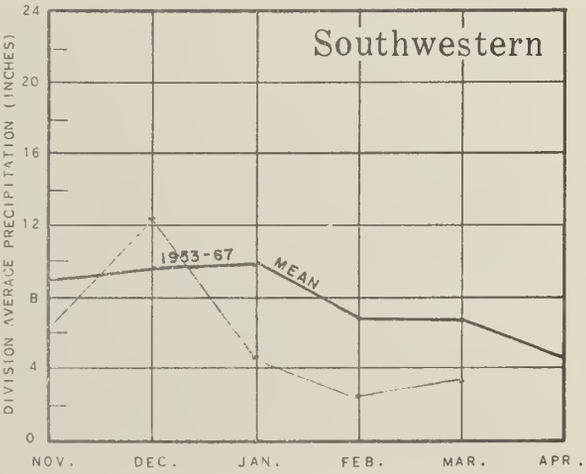












Preliminary Analysis by National Weather Service

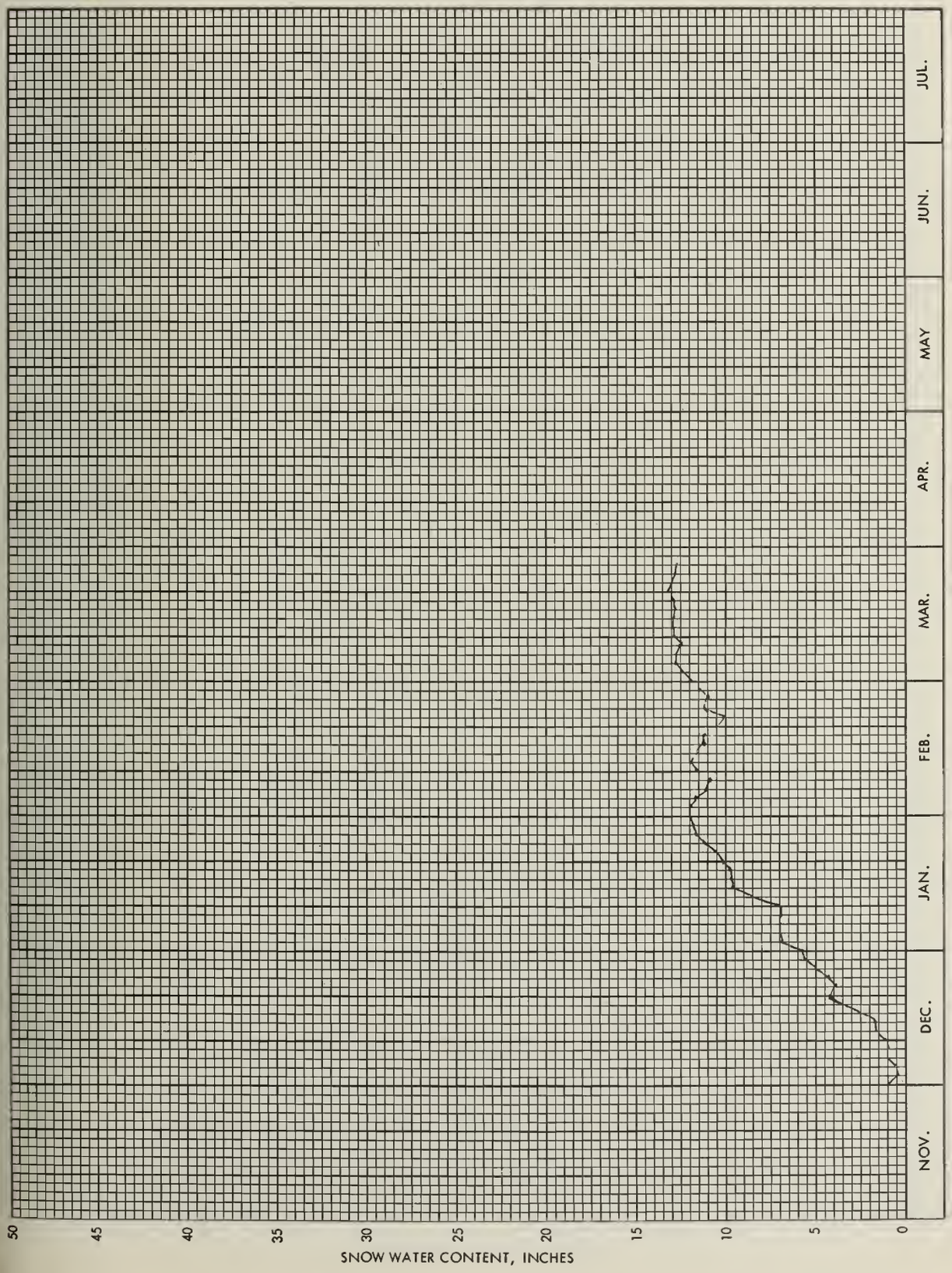
SNOW PILLOW DATA

1972 - 1973

Lake Creek

Sec. 13 T. 26N R. 14 No. 21P41C P Drainage: Wenatchee

Lat. 47 45' Long. 121 42' Elev. 3240



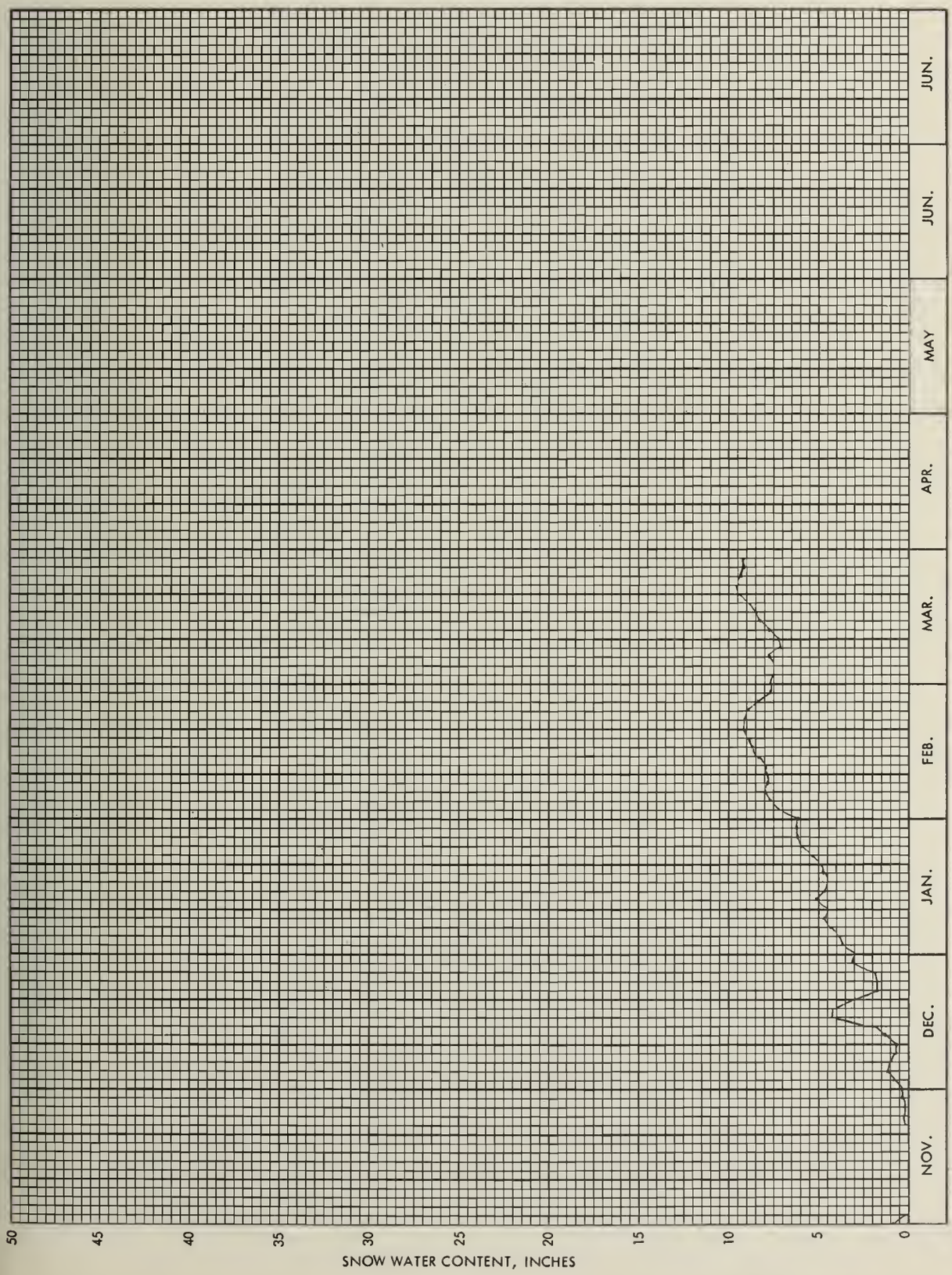
SNOW PILLOW DATA

1972 - 1973

Cougar Mountain - FS

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 121° 40' Elev. 3200'



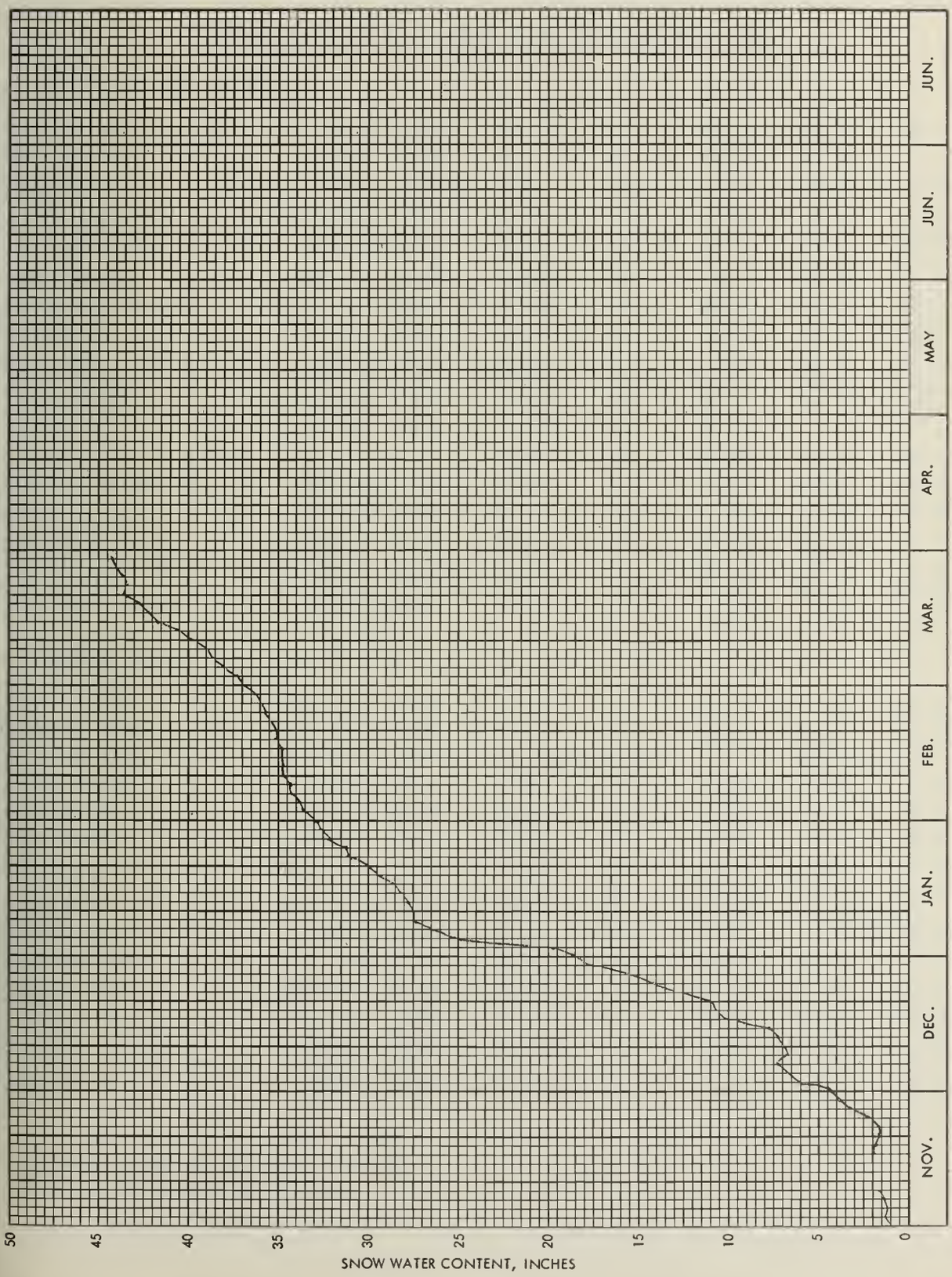
SNOW PILLOW DATA

1972 - 1973

Snowshoe Butte - FS

Sec. 28 T. 21N R. 9E No. 21343SP Drainage: Green River

Lat. 47° 13' Lang. 121° 22' Elev. 5000'



SNOW DATA TO APRIL 1, 1973 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	4/2	77	31.1	68.9	49.6
Baree Midway	15B16	4600	4/2	62	24.4	52.3	- -
Baree Trail	15B15	3800	4/2	0	0.0	8.8	7.8
Benton Meadow	16A02	2344	3/29	0	0.0	0.0	3.2
Benton Spring	16A03	4900	3/29	39	14.4	18.2	20.8
Boyer Mountain	17A02	5250	3/29	62	22.4	26.0	27.9
Brush Creek	14A04	5000	3/27	28	8.1	14.5	13.1
Bunchgrass Meadow	17A01	5000	3/30	72	28.0	32.8	31.8
Chewelah	17A04	4923	3/28	42	13.2	13.1	19.2
Heart Lake Trail	14C10	4800	3/23	27	9.2	39.4	23.0
Hoodoo Basin	15C10	6000	3/28	93	35.4	80.8	54.5
Hoodoo Creek	15C01	5900	3/28	88	33.4	78.3	50.6
Lookout	15B02	5250	3/15	63	20.0	- -	- -
			3/30	59	20.8	54.5	38.4
Mosquito Ridge	16A04A	5100	3/28	73	28.0	45.6	40.2
Nelson	19-Can	3050	3/28	33	12.4	16.7	15.8*
Schweitzer Bowl	16A06	4500	3/29	60	21.8	31.8	- -
Schweitzer Ridge	16A05	6100	3/29	93	35.5	53.1	- -
Smith Creek	16A01	4800	3/30	95	36.9	56.7	50.1
Winchester Creek	17A03	2970	3/29	13	5.6	7.4	11.3
KETTLE RIVER							
Barnes Creek	90-Can	5300	3/26	58	16.7	25.5	21.5*
Big White Mtn.	154-Can	5500	3/30	55	18.5	23.7	20.0*
Bluejoint Mtn.	244-Can	7500	Not Measured			New Course	
Boulder Road	18A02	1450	3/27	0	0.0	0.0	1.8
Butte Creek	18A03	4070	3/27	26	7.0	6.9	9.9
Cabin Creek	18A08	3170	3/27	17	5.0	6.8	8.9
Carmi	126-Can	4100	3/30	18	5.7	9.0	6.4*
Farron # 1	17-Can	4000	3/28	38	12.7	13.2	13.4*
Farron # 2	243-Can	4000	3/28	36	11.5	New Course	
Goat Creek	18A04	3595	3/27	9	2.8	1.7	6.5*
Graystoke Lake	5-Can	5950	3/23	59	18.6	28.5	- -
Monashee Pass	48A-Can	4500	3/26	49	11.6	17.8	14.1*
Old Glory Mtn.	42-Can	7000	3/31	77	29.5	33.6	27.5*
Snow Caps Creek	18A05	2150	3/27	0	0.0	0.0	1.9
Snow Caps Trail	18A06	2720	3/27	2	0.6	2.5	5.7
Summit G. S.	18A07	4600	3/27	25	6.8	- -	9.6

Average based on 1953-67 average
* Average for years of record

USDA-SCS-PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1973 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
KETTLE RIVER (Cont.)							
Trapping Creek Lower	166-Can	3050	3/30	0	0.0	6.2	3.7*
Trapping Creek Upper	165-Can	4450	3/30	18	5.7	11.6	9.5*
COLVILLE RIVER							
Baird	17A06	3215	3/30	6	2.3	0.0	6.4
Carlson	18A09	2885	3/29	0	0.0	0.0	2.7
Chewelah	17A04	4925	3/28	42	13.2	13.1	19.2
Stranger Mountain	17A05	4990	3/28	33	11.0	6.8	14.3
Togo	18A10	3370	3/29	18	6.5	10.4	11.2
SPOKANE RIVER							
Above Burke	15B08	4100	3/30	31	10.6	35.6	25.0
Above Roland	15B07	4350	3/28	42	16.5	52.8	34.8
Below Roland	15B06	3770	3/28	8	3.1	21.8	17.0
Copper Ridge	16B02	4800	3/29	32	11.2	38.6	31.1
Forty-nine Meadows	15B03	5000	3/28	48	17.5	42.3	36.1
Fourth of July Summit	16B03	3100	3/15	6	2.6	9.4	- -
			3/28	0	0.0	5.4	11.2
Granite Peak	15B13A	6000	3/28	91	31.7	71.6	51.2
Kellogg Peak	16B05A	5560	3/28	52	18.9	50.2	33.5
Lookout	15B02	5250	3/15	63	20.0	- -	- -
			3/30	59	20.8	54.5	38.4
Lost Lake	15B14A	6000	3/28	100	36.9	85.7	66.2
Lower Sands Creek	16B01	3400	3/29	25	8.4	27.9	21.0
Medicine Ridge	15B04A	6150	3/28	86	30.2	63.2	- -
Mosquito Ridge	16A04A	5110	3/28	73	28.0	45.6	40.2
Outlaw Creek	15B12A	3750	Discontinued			18.5	17.8
Roland Summit	15B05A	5200	3/28	58	21.5	67.1	41.2
Sherwin	16C01	3200	3/29	13	4.4	21.7	16.6
Sunset	15B09A	5600	3/28	58	20.7	53.8	35.6
SANPOIL RIVER							
Sherman Creek Pass	18A01	5350	3/30	41	12.8	12.7	15.2
OKANOGAN RIVER							
Aberdeen Lake	6-Can	4300	3/30	21	5.4	7.5	6.2*
Blackwell Peak	100-Can	6250	4/2	65	25.2	56.9	36.0*
Boulbau Creek	31-Can	5000	4/1	33	9.9	15.8	12.1*

\# Average based on 1953-67 average

USDA-SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1973 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Bouleau Lake	234-Can	4580	3/25	45	10.8	18.3	- -
Brenda Mine	193-Can	4800	3/15	39	10.3	- -	- -
			3/26	38	11.8	20.9	14.6*
Brookmere	27-Can	3200	3/31	17	5.2	15.7	10.0*
Carrs Landing Lower	167-Can	2250	3/30	0	0.0	0.0	- -
Carrs Landing Upper	168-Can	3200	3/30	0	0.0	4.0	3.8*
Clark +	19A08a	7000	Not Measured			35.5	23.3*
Enderby	130-Can	6250	3/28	112	34.6	51.8	38.7*
Esperon Creek Lower	164-Can	4400	3/25	33	10.5	15.5	13.4*
Esperon Creek Middle	163-Can	4700	3/25	44	14.1	19.2	16.3*
Esperon Creek Upper	162-Can	5400	3/25	48	14.6	22.1	20.8*
Freezeout Meadows New	20A38	5000	3/29	62	23.7	38.8	- -
Graystoke Lake	5-Can	5950	3/23	59	18.6	28.5	- -
Hamilton Hill	107-Can	4900	3/30	35	11.4	33.5	16.3*
Harts Pass	20A05A	6500	3/28	87	33.3	67.9	46.6
Horseshoe Basin +	19A05a	7000	3/30	46	16.1	29.4	13.5
Isintok Lake	152-Can	5510	3/31	26	6.9	16.7	8.3
Lost Horse Mountain	105-Can	6300	3/29	31	8.2	21.0	9.2*
Loup Loup	19A07	4650	3/29	17	6.0	12.0	8.7
McCulloch	4-Can	4200	3/14	26	6.3	- -	- -
			3/25	21	5.7	8.5	6.7*
Missezula Mountain	106-Can	5100	3/20	30	9.0	20.3	9.2*
Mission Creek	5A-Can	6000	3/27	58	17.5	26.2	20.2*
Monashee Pass	48A-Can	4500	3/26	49	11.6	17.8	14.0*
Mount Kobau	156-Can	5950	3/30	35	10.1	17.4	14.1*
Muckamuck +	19A09a	6390	Not Measured			19.6	17.5
Mutton Creek No. 1	19A01	5700	3/28	38	11.5	24.9	14.1
Mutton Creek No. 2	19A04	6000	3/28	41	11.9	23.0	15.1
Mutton Creek No. 2 SP	19A11SP	6000	3/28	-	8.6	New Course	
New Copper Mountain	46A-Can	4000	3/15	13	3.1	- -	- -
			3/29	12	3.8	11.8	5.4*
New Penticton Res. #2	183-Can	3225	3/29	30	6.9	13.8	9.6*
Nickel Plate Mtn.	47-Can	6200	3/27	24	5.8	15.9	8.0*
Oyama Lake	203-Can	4400	3/28	24	6.1	8.7	8.3*
Paysayten +	20A28a	4300	3/30	30	10.5	27.7	14.9
Postill Lake	55-Can	4500	3/30	30	8.5	11.2	8.9*
Quartette Lake	34-Can	4000	3/27	27	7.9	23.4	16.2*
Rusty Creek	19A03	4000	3/29	13	4.5	8.1	7.0
Salmon Meadows	19A02	4500	3/28	26	7.7	12.4	10.6
Silver Star Mountain	99-Can	6050	4/1	74	27.0	41.0	27.8*
Starvation Mtn +	19A10a	6750	Not Measured			25.5	22.7
Summerland Reservoir	3A-Can	4200	3/14	26	6.7	- -	- -
			4/1	26	7.7	15.3	9.0*
Touts Coulee	19A06	2845	3/30	0	0.0	1.9	0.7

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1973 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Trout Creek	3-Can	4700	3/27	24	6.8	15.6	7.2*
Vaseux Creek	233-Can	4600	4/1	21	4.6	9.4	9.3*
White Rocks Mountain	70-Can	6000	Late Report			33.6	22.9*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	3/28	72	28.1	New Course	
Entiat Meadows +	20A33a	4800	3/28	90	35.1	67.6	50.6
Entiat River Trail +	20A34a	3150	3/28	22	8.6	27.8	22.7
Four Mile Ridge +	20B27a	7000	3/28	60	23.4	55.2	- -
Fox Camp +	20A36a	6510	3/28	110	42.9	83.7	61.9
Pope Ridge	20B20	4300	3/29	24	9.3	26.0	20.2
Pugh Ridge +	20A32a	6400	3/28	70	27.3	60.3	40.6
Shady Pass	20A37	5000	3/30	54	21.3	52.8	- -
Snow Brushy +	20A35a	3850	3/28	65	25.4	51.0	43.9
Tommy Creek +	20B21a	5300	3/28	40	15.6	38.6	28.2
METHOW RIVER							
Dollar Watch +	20A29a	7000	3/30	68	23.8	47.9	27.6
Harts Pass	20A05A	6500	3/28	87	33.3	67.9	46.6
Horseshoe Basin +	19A05a	7000	3/30	46	16.1	29.4	13.5
Loup Loup	19A07	4650	3/29	17	6.0	12.0	8.7
Mutton Creek No. 1	19A01	5700	3/28	38	11.5	24.9	14.1
Mutton Creek No. 2	19A04	6000	3/28	41	11.9	23.0	15.1
Mutton Creek No. 2 SP	19A11SP	6000	3/28	-	8.6	New Course	
Rusty Creek	19A03	4000	3/29	13	4.5	8.1	7.0
Salmon Meadows	19A02	4500	3/28	26	7.7	12.4	10.6
War Creek Pass +	20A31a	6500	3/30	84	29.4	2/	43.1
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	3/22	92	35.0	- -	- -
Greenwood Flat +	20A25a	3540	3/22	45	17.1	- -	- -
Little Meadows +	20A24a	5275	3/22	94	35.7	- -	- -
Lyman Lake	20A23A	5900	3/22	119	43.3	106.3	58.5
Park Creek Ridge	20A12A	4600	3/27	83	31.6	65.4	46.5
Rainy Pass	20A09	4780	3/28	82	30.8	65.6	41.2
Safety Harbor	20A30A	6300	3/26	62	21.5	49.5	29.4
War Creek Pass +	20A31a	6500	3/30	84	29.4	2/	43.1

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation
2/ Aerial Marker buried

USDA-SCS-PORTLAND OREGON 1973.

WSFB-X4-L

SNOW DATA TO APRIL 1, 1973 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER							
Berne-Mill Creek	21B23	2925	3/29	39	16.8	46.0	27.5
Berne-Mill Creek New SP	21B41SP	3240	3/29	30	12.8	30.8	- -
Blewett Pass No. 2	20B02	6270	3/29	20	7.4	34.3	16.1
Chiwaukum G. S.	20B16	1810	3/29	0	0.0	20.6	9.6
Fish Lake	21B04	3371	3/27	43	17.9	59.4	35.4
Lake Wenatchee	20B05	1970	3/29	4	2.1	24.1	11.1
Leavenworth R. S.	20B17	1127	3/13	0	0.0	- -	- -
			3/30	0	0.0	2.0	- -
Lyman Lake	20A23A	5900	3/22	119	43.3	106.3	58.5
Merritt	20B18	2140	3/29	8	4.1	27.6	14.2
Stevens Pass	21B01	4070	3/14	90	34.0	85.1	49.7
			3/29	83	35.0	87.0	54.1
Stevens Pass Sand Shed	21B45	3700	3/14	57	20.3	56.1	- -
			3/29	52	20.8	56.0	- -
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	3/29	15	6.2	9.9	7.7
Scout-A-Vista	20B04	3400	3/29	10	4.2	10.5	6.4
STEMILT CREEK							
Jump-Off	20B08	4450	3/28	16	6.0	12.6	7.3
Stemilt Slide	20B06	5000	3/28	26	9.0	22.6	13.3
Upper Wheeler	20B07	4400	3/28	13	5.7	13.1	8.3
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	3/28	26	10.0	21.5	- -
Colockum Creek Lower	20B23	4300	3/28	14	5.8	13.0	- -
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	3/29	0	0.0	4.3	4.9
Big Boulder Creek	21B09	3200	3/27	20	7.1	32.4	18.7
Blewett Pass No. 2	20B02	4270	3/29	20	7.4	34.3	16.1
Bumping Lake	21C08	3450	3/14	22	7.9	22.6	16.9
			3/29	17	6.6	20.5	16.8
Bumping Lake New	21C36	3400	3/14	28	10.5	28.9	19.9
			3/29	23	8.8	26.6	17.2
Cayuse Pass	21C06	5300	3/30	135	54.5	128.2	91.2

Average based on 1953-67 average

USDA SCS-PORTLAND OREGON 1973

WSFB-X4-L

SNOW DATA TO APRIL 1, 1973 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
Colockum Pass	20B09	5370	4/3	33	11.1	26.0	18.6
Cooke Creek	20B10	4123	3/30	0	0.0	11.9	5.5
Corral Pass	21C13	6000	3/31	71	32.5	69.0	41.7
Fish Lake	21B04	3371	3/27	43	17.9	59.4	35.4
Green Lake	21C10	6000	3/29	59	23.0	54.5	33.2
Grouse Camp	20B11	5385	3/29	34	11.0	30.3	18.2
High Creek	20B12	2930	3/29	0	0.0	11.2	0.9
Joe Lake	21B46a	4624	3/28	106	42.4	- -	- -
Lake Cle Elum	21B14M	2200	3/15	0	0.0	24.4	11.0
			3/30	0	0.0	16.5	5.7
Lemah Creek +	21B47a	3327	3/28	78	31.2	59.0	- -
Manashtash	20C01	3935	3/28	0	0.0	0.0	1.8
Morse Lake	21C17	5400	3/29	102	42.8	69.4	62.0
Nanum	21B39	2340	3/29	11	4.1	14.6	8.0
Olallie Meadows	21B02	3625	3/29	50	19.6	81.7	51.3
Satus Pass	20D01	4030	3/29	0	0.0	8.3	12.1
Stampede Pass	21B10	3000	3/15	-	26.0	46.2	45.2
			4/2	-	27.2	46.7	48.8
Trail Creek	20B14	3360	3/20	0	0.0	0.0	- -
Tunnel Avenue	21B8	2450	3/13	29	9.2	38.6	25.2
			3/30	21	8.2	36.0	25.9
Van Epps Pass +	20B26a	5925	Not Measured			- -	- -
			3/28	91	36.4	105.6	- -
Walters Flat	20B15	3360	3/29	0	0.0	11.0	4.9
Waptus Lake +	21B49a	3024	3/28	61	24.4	64.8	- -
White Pass (E. Side)	21C28	4500	3/15	34	11.1	51.6	24.4
			3/28	34	11.9	48.3	26.6
White Pass (L. Lake)	21C27	4500	3/28	33	14.4	52.4	32.6
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	3/29	0	0.0	4.3	4.9
Green Lake	21C10	6000	3/29	59	23.0	54.5	33.2
LOWER COLUMBIA							
ASOTIN CREEK							
Spruce Springs	17C04	5700	3/26	41	14.2	35.8	- -

Average based on 1953-67 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973-

WSFB-X4-L

SNOW DATA TO APRIL 1, 1973 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average *
MILL CREEK							
Homestead	17A01	4030	3/28	6	2.4	7.8	7.9
Martin Springs	17C02	4400	3/28	13	5.2	19.5	14.5
Tollgate	18B3M	5070	3/29	39	15.0	33.6	25.9
KLICKITAT RIVER							
Satus Pass	20D01	4030	3/29	0	0.0	8.3	12.1
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	3/28	62	24.7	66.3	49.7
Surprise Lakes	21C13A	4250	3/28	56	22.3	80.7	54.8
WIND RIVER							
Old Man Pass	21D19	3100	3/28	11	4.4	25.2	20.7
LEWIS RIVER							
Blue Lake +	21C22a	4800	3/28	132	50.2	130.0	84.2
Bob's Trail	21C21	2200	3/28	0	0.0	22.1	13.8
Calamity Ridge +	22D1a	2500	3/28	0	0.0	5.4	- -
Council Pass +	21C18a	4200	3/28	56	23.3	64.2	42.6
Cultus Creek	21C12	4000	3/28	62	24.7	66.3	49.7
Divide Meadow +	21C29a	5600	3/28	84	31.9	102.0	60.0
Grand Meadow	21C25	3500	3/28	26	11.0	38.2	29.0
Lone Pine Shelter	21C26	3800	3/30	57	21.4	56.3	43.2
Marble Mountain +	22C05a	3200	3/28	22	13.2	45.2	40.2
Mosquito Meadows	21C19	4100	3/30	60	22.6	58.6	47.4
New Muddy River	22C06	1400	3/28	0	0.0	5.7	10.8
Old Man Pass	21D19	3100	3/28	11	4.4	25.2	20.7
Plains of Abraham +	22C1a	4400	3/28	120	44.4	90.0	70.2
Smith Creek Road	22C04	2100	3/28	0	0.0	21.9	17.2
Spencer Meadow +	21C20a	3400	3/28	22	9.2	29.8	25.6
Surprise Lakes	21C13A	4250	3/28	56	22.3	80.7	54.8
Table Mountain +	21C24a	4200	3/28	70	28.0	66.6	49.2
Timbered Peak +	21D18a	3000	3/28	6	2.5	10.8	23.7

* Average based on 1950-67 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973

WSFB-X4-L

SNOW DATA TO APRIL 1, 1973 - APPENDIX 8

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COWLITZ RIVER							
Cayuse Pass	21C06	5300	3/30	135	54.5	128.2	91.2
Mosquito Meadows	21C19	4100	3/30	60	22.6	58.6	47.4
Ohanapecosh	21C32	2200	3/28	0	0.0	27.9	16.4
Packwood Lake	21C31	2870	3/30	0	0.0	27.9	13.5
Pigtail Peak	21C33	5900	3/15	96	37.0	110.3	63.3
			3/28	96	37.8	104.3	72.9
Plains of Abraham +	22C01a	4400	3/28	120	44.4	90.0	70.2
Potato Hill	21C14	4500	3/30	46	17.9	50.1	33.0
White Pass (E. Side)	21C28	4500	3/15	34	11.1	51.6	24.4
			3/28	34	11.9	48.3	26.6
White Pass (L. Lake)	21C27	4500	3/28	33	14.4	52.4	32.6
Willame Creek	21C30	3250	3/30	36	13.8	45.0	35.0
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	3/27	65	25.7	84.5	50.1
Longmire	21C03	2760	3/27	0	0.0	21.8	10.6
New Paradise Park	21C35	5500	3/27	118	48.6	124.6	73.9
Stem Glade	21C01	5050	3/27	107	42.6	116.1	74.4
WHITE RIVER							
Cayuse Pass	21C06	5300	3/30	135	54.5	128.2	91.2
Corral Pass	21C13	6000	3/31	71	32.5	69.0	41.7
Morse Lake	21C17	5400	3/29	102	42.8	69.4	62.0
GREEN RIVER							
Airstrip	21B24	1800	3/28	0	0.0	2.5	- -
Charley Creek	21B25	1200	3/28	0	0.0	0.0	- -
Cougar Mountain SP	21B42SP	3200	3/29	12	5.0	25.6	- -
Grass Mtn. No. 2	21B27	2900	3/28	28	10.7	35.4	26.1
Grass Mtn. No. 3	21B28	2100	3/28	0	0.0	8.1	- -
Lester Creek	21B29	3100	3/28	34	12.7	41.1	28.7
Lynn Lake	21B50	4000	3/28	28	10.7	41.2	- -
Sawmill Ridge	21B29	4700	3/28	56	19.7	66.6	46.0
Snowshoe Butte SP	21B43SP	5000	3/29	88	38.2	96.2	- -

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1973 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
GREEN RIVER (Cont.)							
Stampede Pass SP	21B10	3860	3/15	-	26.0	46.2	45.2
			4/2	-	27.2	46.7	48.8
Twin Camp	21B30	4100	3/28	40	15.3	37.2	31.0
CEDAR RIVER							
City Cabin	21B03	2390	3/27	8	3.0	26.2	18.3
Mt. Gardner	21B21	3300	3/27	0	0.0	22.0	19.8
Mt. Lindsay	21B16	2500	3/30	15	5.7	24.1	17.7
Mt. Washington New	21B50	3000	3/30	0	0.0	New Course	
Rex River	21B17	2400	3/30	14	4.8	28.5	19.8
S. F. Cedar	21B06	3000	3/27	15	5.6	35.5	24.8
Tinkham Creek	21B20	3400	3/27	21	6.5	36.9	23.2
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	3/29	71	25.9	62.9	- -
Lake Elizabeth	21B19	2900	3/28	53	19.7	71.2	46.9
Olallie Meadows	21B02	3625	3/29	50	19.6	81.7	51.3
S. F. Tolt	21B18	1900	3/29	0	0.0	0.0	- -
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	3/28	53	19.7	71.2	46.9
Stevens Pass	21B01	4070	3/14	90	34.0	85.1	49.7
			3/29	83	35.0	87.0	54.1
Stevens Pass S. Shed	21B45	3700	3/14	57	20.3	56.1	- -
			3/29	52	20.8	56.0	- -
SKAGIT RIVER							
Beaver Creek Trail	21A06	2200	3/28	8	3.6	19.9	13.6
Beaver Pass	21A01	3680	3/29	51	19.0	49.7	35.6
Brown Top Ridge	21A28a	6000	3/29	126	50.0	97.2	- -
Cloudy Pass	20A22a	6500	3/22	92	35.0	- -	- -
Devils Park	20A04	5900	3/28	86	34.0	69.9	46.0
Freezeout Cr. Trail	20A01	3500	3/29	24	9.2	21.3	13.4
Freezeout Meadows New	20A30	5000	3/29	62	23.7	38.8	- -

Average based on 1953-67 average

USDA-ECS-PORTLAND OREGON 1973.

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SNOW DATA TO APRIL 1, 1973 - APPENDIX 10

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
SKAGIT RIVER (Cont.)							
Granite Creek	21A29	3500	3/28	32	11.4	31.4	- -
Harts Pass	20A05A	6500	3/28	87	33.3	67.9	46.6
Hozomeen Lake	21A02	2600	3/29	7	3.1	13.4	10.4
Klesilkwa	35B-Can	3700	3/30	20	6.8	31.1	15.6*
Lyman Lake +	20A23A	5900	3/22	119	43.3	106.3	58.5
Meadow Cabins	20A08	1900	3/28	2	1.0	14.4	7.5
New Hozomeen Lake	21A30	2800	3/29	17	6.6	17.5	- -
New Tashme	26A-Can	2500	4/1	3	1.5	23.1	11.9*
Quartette Lake	34-Can	4000	3/27	27	7.9	23.4	16.2*
Rainy Pass	20A09	4780	3/28	82	30.8	65.6	41.2
Thunder Basin	20A07	4200	3/28	50	15.5	35.8	25.8
BAKER RIVER							
Dock Butte	21A11A	3800	3/31	134	56.2	100.0	81.0
Easy Pass	21A07A	5200	4/1	153	61.7	119.4	96.7
Jasper Pass	21A06A	5400	3/29	169	69.4	112.3	103.6
Komo Kulshan	21A17	800	3/30	0	0.0	15.8	- -
Marten Lake	21A09A	3600	4/1	142	59.8	110.8	88.2
Mount Blum +	21A18a	5800	Not Measured			86.4	- -
Panorama New	21A26	4300	3/15	128	55.1	98.3	- -
			4/2	132	59.3	99.5	- -
Rocky Creek	21A12A	2100	3/30	41	16.9	39.4	30.5
Schreibers Meadow	21A10A	3400	3/31	112	47.2	84.5	73.3
S. F. Thunder Creek	21A14A	2200	3/30	0	0.0	9.1	5.3
Sulphur Creek	21A13	1600	3/30	4	2.2	22.7	13.7
Three Mile Creek	21A15	4500	3/30	0	0.0	2.4	- -
Watson Lakes	21A08A	4500	3/31	127	47.8	103.5	78.2
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	3/29	99	44.6	92.3	- -
Canyon +	21A20a	5100	3/29	136	61.2	2/	- -
Glacier Creek	21A23	3700	3/30	42	15.1	36.9	- -
Panorama New	21A26	4300	3/15	128	55.1	98.3	- -
			4/2	132	59.0	99.5	- -
Twin Lakes +	21A21a	5200	3/29	161	72.4	2/	- -

Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation
2/ Aerial Marker buried

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SNOW DATA TO APRIL 1, 1973 - APPENDIX 11

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OLYMPIC PENINSULA							
DUNGENESS RIVER							
Deer Park	23B04	5200	3/26	49	16.9	28.1	26.4
MORSE CREEK							
Cox Valley	23B14	4500	3/31	82	31.1	45.3	- -
ELWHA RIVER							
Hurricane	23B03	4500	3/31	49	16.5	29.9	29.3
SKOKOMISH RIVER							
Black & White	23B07	4200	3/28	85	32.2	52.2	47.9
Black & White Lakes	23B06	4700	3/28	118	52.3	84.4	67.3
Four Streams	23B10	3000	3/28	51	20.1	31.4	- -
Home Sweet Home	23B05	5200	3/28	150	62.5	104.7	81.9
SOLEDUCK RIVER							
Deer Lake	23B01	3900	Not Measured				

Average based on 1953-67 Average

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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AT URBANA-CHAMPAIGN

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF
MAY 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months befare the snow melts and appears as streamflaw. Since the runoff from precipitation os snow is delayed, estimates of snawmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent af the mountain snowpack.

Forecasts become mare accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snaw depth and water equivalent at surveyed and marked locations in mountoin areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same locatian near the same dates each year.

Snow surveys are made monthly ar semi-manthly fram January 1 through June 1 in mast states. There are about 1900 snaw caurses in Western United States and in the Columbia Basin in British Calumbia. Networks af automatic snow water equivalent and related data sensing devices, along with radia telemetry are expanding and will provide a cantinuous recard af snaw water and other parameters at key locations.

Detailed dato on snow course and soil moisture measurements are presented in state and local reparts. Other data on reservoir storage, summaries of precipitation, current streamflow, and sail moisture conditions at valley elevations are also included. The report far Western United States presents a broad picture of water supply outlook conditians, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservairs.

Snow survey and soil moisture data for the period of record are published by the Sail Conservatian Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published abaut October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies af the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained fram state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Raom 217, Ancharage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Raom 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Bax 2440, Casper, Wyaming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reparts prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

USDA SCS-PORTLAND OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
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SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
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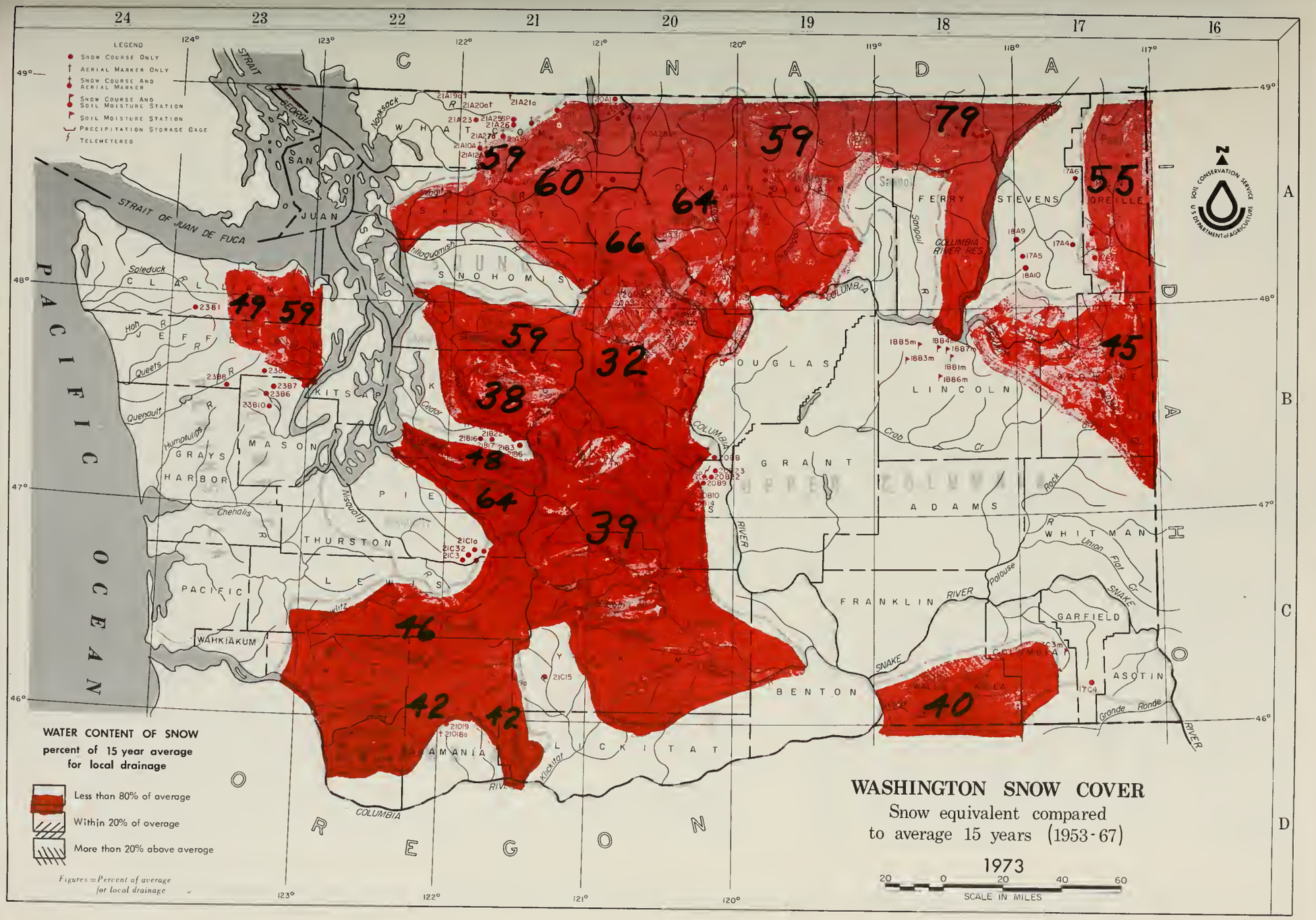
SPOKANE, WASHINGTON 99201


WASHINGTON SNOW COVER
Snow equivalent compared to average 15 years (1953-67)
1973
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average for local drainage
Less than 80% of average
Within 20% of overage
More thon 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
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CANADA
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Brief	20819	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20820	22	29N	18E	4300
Pope Ridge Snow Pillow	20824SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20821a	10.	28N	18E	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Berne-Mill Creek	21823	7	26N	15E	2925
Berne-Mill Creek (New)	21841SP	13	26N	14E	3240
Blewett Pass No. 2	2082	35	22N	17E	4270
Chiwaukum G. S.	20816	4	25N	17E	1810
Lake Wenatchee	2085	33	27N	17E	1970
Leavenworth R. S.	20817	1	24N	17E	1127
Merritt	20818	4	26N	16E	2140
Stevens Pass	2181	14	26N	13E	4070
Stevens Pass Sand Shed	21845	12	26N	19E	3700
Trough #2	20825SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Colockum Creek Upper	20822	11	20N	20E	5300
Colockum Creek Lower	20823	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	2087PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	1883m	28	27N	31E	2750
Krause	1884m	21	27N	33E	2420
Sheffels	1885m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	1BB6m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	2189	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20810	17	19N	20E	4123
Oomery Flat	21844m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21846a	22	23N	12E	4624
Lake Cle Elum	21814M	15	20N	14E	2200
Lemah Creek	21847a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20813	4	20N	19E	3875
Trail Creek	20814	20	19N	20E	3360
Tunnel Avenue	2188	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20815	22	20N	19E	3360
Waptus Lake	21849a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21825	27	21N	8E	1200
Cougar Mountain	21842SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21828	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21831	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21810	25	21N	11E	3000
Twin Camp	21830	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21822	31	22N	10E	2500
Mt. Lindsay	21816	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	2186	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Alpine Meadow	21848	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21818	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Lake Elizabeth	21819	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	BE	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Park	2384	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23B14	29	28N	6W	

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	2383	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900

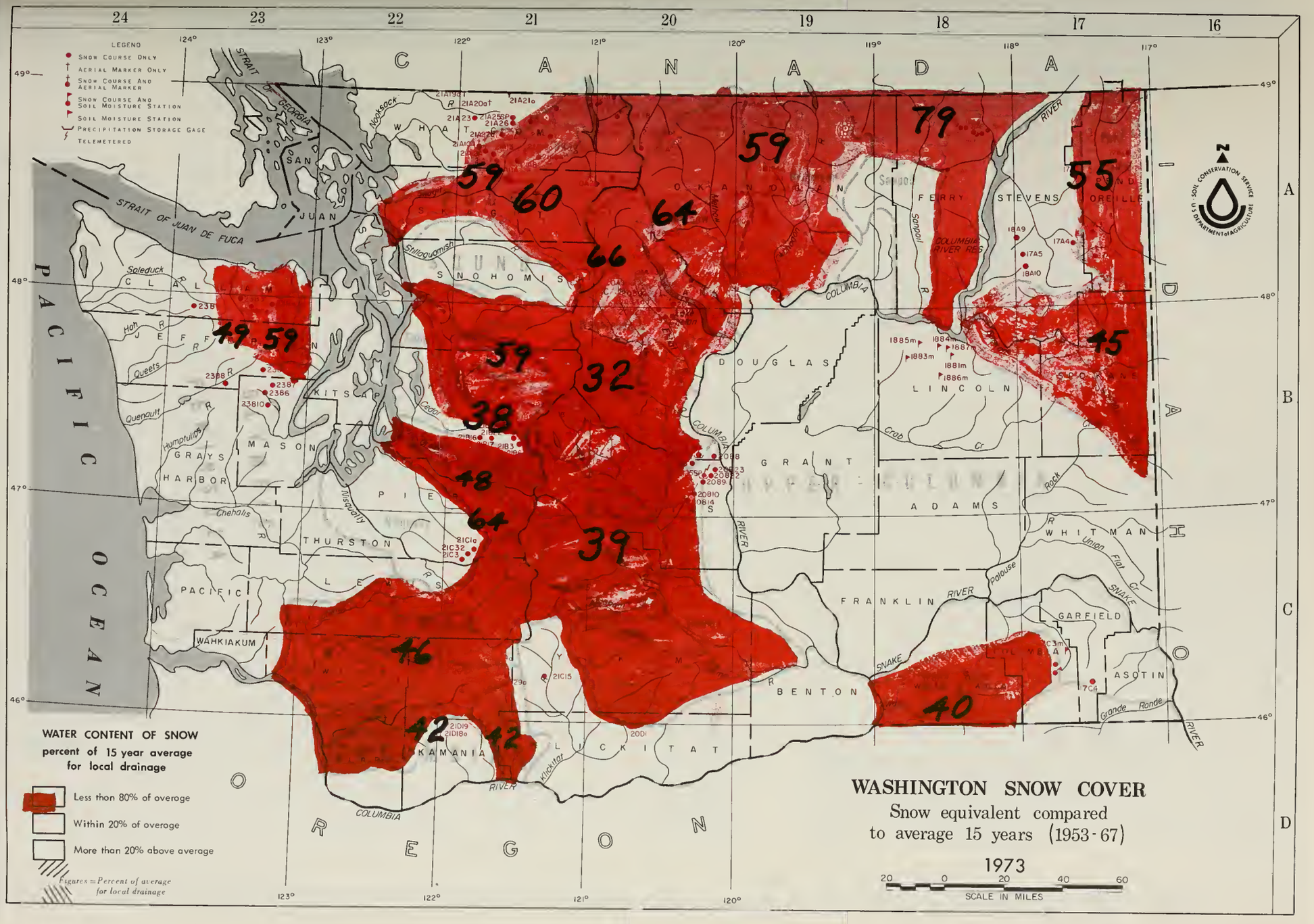
Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1953-67)
1973
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
OREGON
PACIFIC OCEAN
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
OKANOGAN
FERRY
STEVENS
PEND OREILLE
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
CLARK
SKAMANIA
KLICKITAT
YAKIMA
DOUGLAS
LINCOLN
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	1BAB	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Brief	20819	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20827a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20820	22	29N	18E	4300
Pope Ridge Snow Pillow	20824SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20821a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21823	7	26N	15E	2925
Berne-Mill Creek (New)	21841SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20BS	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20818	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	2184S	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20822	11	20N	20E	5300
Colockum Creek Lower	20823	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	2084	18	21N	20E	3400
Stemilt Creek					
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	2087PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	1883m	28	27N	31E	2750
Krause	1884m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	1886m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	2189	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20811	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21846a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21847a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20813	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21849a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21018a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21813	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21825	27	21N	8E	1200
Cougar Mountain	21842SP	21	21N	9E	3200
Grass Mountain No. 2	21827	14	20N	8E	2900
Grass Mountain No. 3	21828	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21831	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21810	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21822	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	2186	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	2184B	31	27N	9E	3500
Blallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A3B	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A1Ba	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

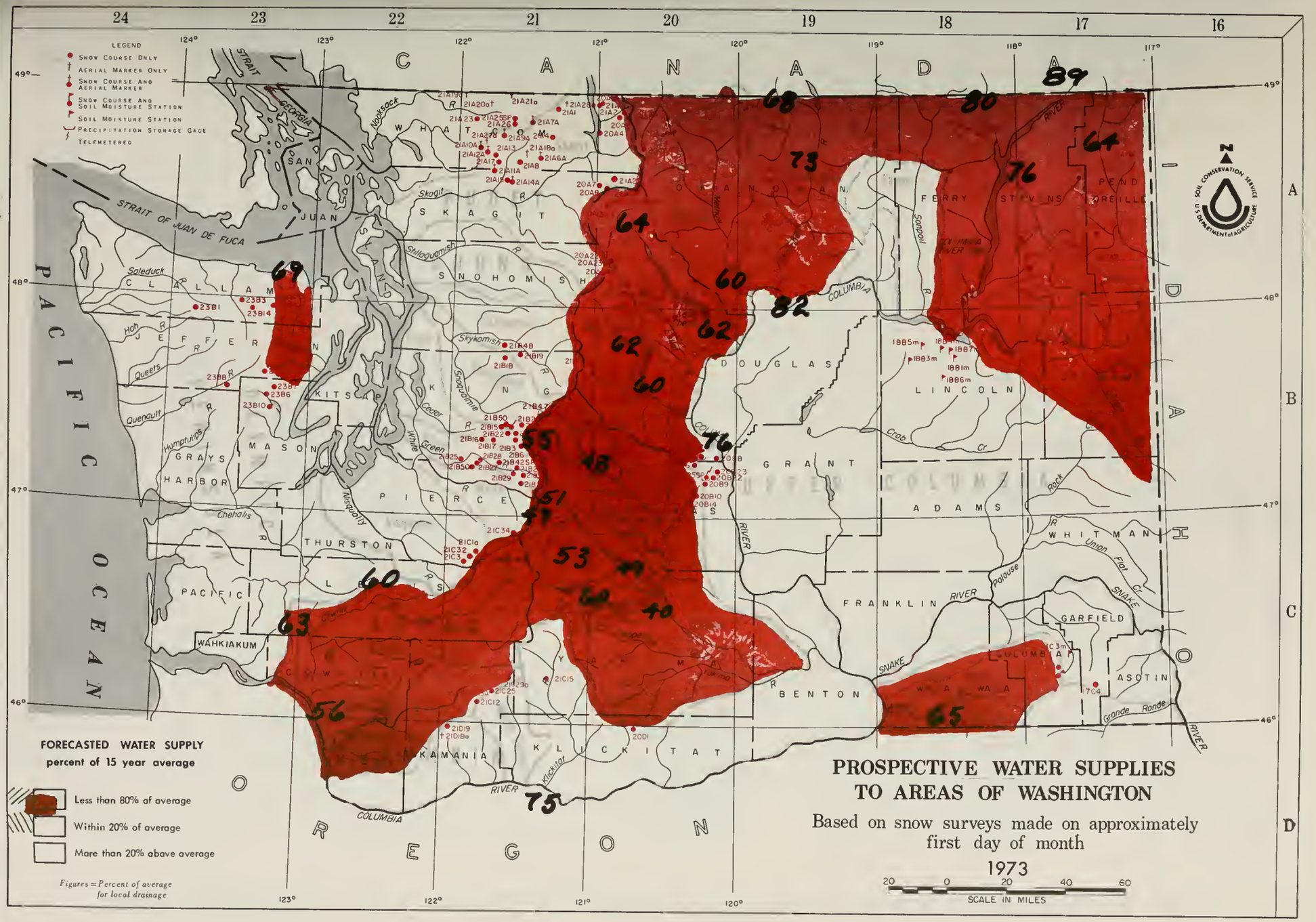
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900
Soleduck River					
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1973
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course and Aerial Marker
Snow Course and Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
PACIFIC OCEAN
OREGON
IDAHO
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
PACIFIC
WAHKIAKUM
KING
OKANOGAN
FERRY
STEVENS
PEND OREILLE
DOUGLAS
LINCOLN
GRANT
ADAMS
WHITMAN
FRANKLIN
GARFIELD
COLUMBIA
ASOTIN
BENTON
KLICKITAT
KAMANIA
COLUMBIA RIVER
SNAKE RIVER
Grande Ronde RIVER
Palouse
Union Flat Cr.
Rock Cr.
Crab Cr.
Sanpoil
Okanogan
Methow
Nooksack
Skagit
Stillaguamish
Skykomish
Snoqualmie
Cedar
White
Green
Puyallup
Nisqually
Chehalis
Humptulips
Quinault
Queets
Hoh
Soleduck
Klickitat
89
80
68
73
64
76
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60
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55
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Brief	20B19*	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	2082	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Oock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A1Ba	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500
Nooksock River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	29	28N	6W	
Elwho River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
May 1, 1973

The water supply situation in the Columbia Basin in Canada and Washington has deteriorated from that which was reported last month. Runoff was well below normal and precipitation was well below normal. When this situation occurs, quite often there is an offsetting influence, but this year the lack of precipitation has the stronger influence and most forecasts have been lowered from 3 to 10% for the remaining runoff period. The situation now is very similar to that which occurred in 1963 over most of the Columbia Basin. The one redeeming factor in that year was the well above normal rainfall that occurred in April and May. This has not occurred this year. A comparison of forecasts with runoff records for 1963 indicates that most streams will flow approximately the same amount. Some, like the Lewis, will be worse. The snow pack over the basin now ranges from a low of 32% of normal on the Wenatchee River to a high of 79% for the Kettle. These figures are somewhat misleading when compared to earlier readings, as many of the snow courses which normally have snow on May 1 are now bare. Precipitation records, as supplied by the National Weather Service, range from zero precipitation, as measured at Winthrop, to a few isolated stations which reported normal or above rainfall. The drainage division averages range from a low of 19% for the North Central Division to 54% for the North Eastern Division. The Columbia in Canada had a rainfall that was 72% of normal. Runoff, likewise, was very low during the month, ranging from 18% for the Yakima at Kiona to a high of 73% for the Columbia as measured at Birchbank.

SNOW COVER

As reported last month, the pack continues to be the lowest in the state since 1963. The previous lows were the years of 1942, 1944 and 1954. A ten year cycle seems to be occurring. The several watersheds in the upper Columbia Basin range from 68% below normal for the Wenatchee River to 21% below normal for the Kettle. On the Lower Columbia, the snow cover ranges from 60% below normal to 54% below. Along the Puget Sound, the snow cover ranges from 62% below normal to 56% below and on the Olympic Peninsula, from 51% below to 41% below. Compared to the high snowfall year of 1972, the percentage figures are considerably less.

RESERVOIRS

The reservoirs are reported to have below normal amounts of water in storage as of May 1, with the exception of three small irrigation reservoirs and Ross Reservoir in the Skagit drainage. Last month only a few reservoirs had less than normal amounts of water in storage, but the lack of inflow during the month of April has hurt all of these storage projects. As reported last month, careful management and normal to above precipitation will be required for the irrigation reservoirs to supply adequate water. Precipitation has been subnormal and it is now anticipated that many reservoirs will not fill under normal conditions. Power shortages have already been felt and will become more pronounced as further cuts of industrial power will occur.

PRECIPITATION

The main thing about precipitation, as reported by the National Weather Service, was the lack of it during the month of April. Some areas reported no measureable amounts during the month and several reported only one or two hundredths of an inch occurred for the total months catch. The lowest division for rainfall was the North Central which had only 19% normal rainfall. This increased to 54% in the North Eastern portion of the state and on up to 72% for the Columbia River in Canada.

STREAMFLOW

Runoff during the month of April was all well below normal with the greatest amount occurring on the Columbia River, as measured at Birchbank - 27% below normal. This dropped 10% due to the influence of the Pend Oreille River, as measured at International Boundary. The low point in the state was the Yakima River at Kiona, having only 18% of a normal runoff for the month. Runoff forecasts have been generally reduced and now range from a high of 89% of normal for the Columbia at Birchbank for the May-September period, to a low of 40% of normal for the Yakima River, as measured near Parker. Numerical forecasts can be found in the following tabulations.

STREAMFLOW FORECASTS - MAY 1973

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1972 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
			COLUMBIA BASIN				
Columbia River System							
Columbia River	38730	89	May-Sep	53649	45815	33048	43577
at Birchbank 1/	32830	87	May-Jul	43659	36572	26426	37692
	20600	85	May-Jun	31436	26832	19447	24252
Columbia River	51300	82	May-Sep	77387	70587	50708	62799
at Grand Coulee 1/	41800	80	May-Jul	65326	59185	42654	52240
	30600	73	May-Jun	49770	45787	33665	39230
Columbia River bl.	52400	76	May-Sep	89947	77135	54409	68964
Rock Island Dam 1/	42550	74	May-Jul	76536	65272	46101	57500
	31500	75	May-Jun	58145	50620	36540	43110
Columbia River at	69350	75	May-Sep	119696	111538	80458	92456
The Dalles, OR 1/	59350	77	May-Jul	102877	95734	68366	77330
	44150	74	May-Jun	81356	76390	55159	59690
Pend Oreille River System							
Pend Oreille River	8900	64	May-Sep	17909	16692	13567	13910
bl. Box Canyon	7850	62	May-Jul	16306	15402	12506	12669
	6400	60	May-Jun	11726	12997	10815	10635
Kettle River System							
Kettle River	1300	80	May-Sep	2068	2020	1005	1667
nr. Laurier	1250	80	May-Jul	1984	1956	974	1571
	1100	79	May-Jun	1743	1707	910	1393

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Streamflow Forecasts - May 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Fore-cast Period	1972	1971	1970	15-Yr. Average 1953-67
Kettle River System (Cont.)							
Colville River	76	78	May-Sep	76	108	63	98
at Kettle Falls	66	77	May-Jul	65	96	54	86
	58	76	May-Jun	56	84	49	76
Spokane River System *							
Spokane River	1010	48	May-Sep	3100	2984	1952	2120
at Post Falls ID 2/	940	46	May-Jul	2973	2840	1862	2025
	880	47	May-Jun	2742	2566	1749	1882
Okanogan River System							
Similkameen River	970	68	May-Sep	3118	1865	816	1431
nr. Nighthawk	900	68	May-Jul	2949	1774	775	1325
	770	70	May-Jun	2426	1511	705	1103
Okanogan River	1170	73	May-Sep	3603	2096	869	1609
nr. Tonasket	1060	73	May-Jul	3273	1948	810	1449
	830	70	May-Jun	2646	1643	731	1190
Methow River System							
Methow River	580	60	May-Sep	1818	1263	593	969
nr. Pateros	550	61	May-Jul	1678	1183	557	895
	460	61	May-Jun	1383	985	503	748
Chelan River System							
Chelan River	710	62	May-Sep		1456	848	1148
at Chelan 3/	630	63	May-Jul		1258	759	1001
	480	64	May-Jun		924	626	752
Stehekin River	530	64	May-Sep	1167	1044	641	827
at Stehekin	450	65	May-Jul	975	878	553	695
	335	66	May-Jun	704	608	442	509
Entiat River	156		May-Sep		298	154	--
nr. Ardenvoir	142		May-Jul		268	142	--
	118		May-Jun		197	123	--

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Couer d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

Streamflow Forecasts - May 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Fore-cast Period	1972	1971	1970	15-Yr. Average 1953-67
Wenatchee River System							
Wenatchee River	730	62	May-Sep	1764	1544	930	1183
at Plain	675	64	May-Jul	1523	1355	852	1053
	520	65	May-Jun	1109	952	715	802
Wenatchee River	965	60	May-Sep	2538	2104	1293	1606
at Peshastin	940	65	May-Jul	2216	1862	1195	1444
	730	66	May-Jun	1634	1318	1009	1108
Stemilt Basin nr. Wenatchee	102 *	78	May-Sep	145*	148*	123*	131*
Yakima River System							
Yakima River	65	55	May-Sep		176	108	118
nr. Martin 4/	57	53	May-Jul		163	100	107
	48	55	May-Jun		124	91	88
Yakima River	380	48	May-Sep		1194	733	790
at Cle Elum 5/	330	47	May-Jul		1073	670	707
	290	50	May-Jun		828	590	584
Yakima River	525	40	May-Sep		2543	1218	1308
nr. Parker 6/	520	40	May-Jul		2290	1240	1292
	495	43	May-Jun		1823	1188	1153
Kachess River	47	46	May-Sep		157	93	102
nr. Easton 7/	44	46	May-Jul		148	90	95
	39	48	May-Jun		115	83	81
Cle Elum River	210	50	May-Sep		579	386	415
nr. Roslyn 8/	190	50	May-Jul		520	353	375
	150	50	May-Jun		385	301	303
Bumping River	65	49	May-Sep		183	119	133
nr. Nile 9/	59	49	May-Jul		164	112	121
	51	53	May-Jun		114	97	97

* Thousands of Miners' inches

4/ Observed flow corrected for storage in Lake Keechelus.

5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

7/ Observed flow corrected for storage in Lake Kachess.

8/ Observed flow corrected for storage in Lake Cle Elum.

9/ Observed flow corrected for storage in Bumping Lake.

Streamflow Forecasts - May 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Yakima River System (Cont.)							
American River	57	51	May-Sep		162	119	112
nr. Nile	52	50	May-Jul		145	111	103
	42	50	May-Jun		104	97	83
Tieton River	115	53	May-Sep		297	220	216
at Tieton Dam 10/	94	52	May-Jul		243	183	181
	75	54	May-Jun		169	147	138
Naches River	365	49	May-Sep		1038	748	748
nr. Naches 11/	330	49	May-Jul		937	686	668
	280	51	May-Jun		722	601	547
Ahtanum Creeks	24	60	May-Sep	65	55	37	40
nr. Tampico 12/	21	61	May-Jul	59	49	33	35
	19	62	May-Jun	49	40	29	30
Lower Columbia River System							
Mill Creek	12	65	May-Sep		21	19	18
nr. Walla Walla	9	64	May-Jul		17	15	14
	7	60	May-Jun		15	13	12
Lewis River	535	56	May-Sep		1443	631	956
at Ariel 13/	405	51	May-Jul		1222	514	796
	340	52	May-Jun		958	440	657
Cowlitz bl.	1000	60	May-Sep		2383	1246	1680
Mayfield Dam	840	59	May-Jul		2045	1056	1427
	645	57	May-Jun		1517	877	1132
Cowlitz River	1340	63	May-Sep		3043	1584	2125
at Castle Rock 14/	1090	61	May-Jul		2587	1324	1794
	880	62	May-Jun		1918	1102	1426
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	105	69	May-Sep		178	122	153
nr. Sequim	85	70	May-Jul		136	101	122
	60	70	May-Jun		88	75	86

10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about May 1, 1973, as percent of the same date in 1972 and 1971 and average of record.

Tributary Basin	No. of Courses Average	1973 Snow Water Expressed as percent of 1972	1971	1953-67
		UPPER COLUMBIA BASIN		
Pend Oreille	14	42	49	55
Kettle	6	65	65	79
Spokane	7	31	36	45
Okanogan	30	39	51	59
Methow	2	42	48	64
Chelan	2	41	50	66
Entiat	7	34	40	60
Wenatchee	4	18	20	32
Yakima	8	28	28	39
		LOWER COLUMBIA		
Mill Creek	1	20	26	40
White Salmon	2	26	24	42
Lewis	11	27	24	42
Cowlitz	5	31	37	46
		PUGET SOUND		
Nisqually	3	32	-	-
White	2	42	39	64
Green	2	44	42	48
Snoqualmie	1	22	21	38
Skykomish	2	28	31	59
Skagit	11	34	40	60
Baker	8	46	50	59
Nooksack				
		OLYMPIC PENINSULA		
Skokomish	3	55	-	-
Elwha	1	40	31	49
Dungeness	1	43	39	59

RESERVOIR STORAGE - 1000 Feet

ASIN or TREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (May) 1973	1972	1971	Normal*
		COLUMBIA				
ookane	Coeur d'Alene Lake	225.1	116.1	208.7	281.3	200.9
olumbia	Franklin D. Roosevelt Lake	5232.0	-42.5	497.3	743.6	3444.9
olumbia	Banks Lake	761.8	319.0	212.2	543.1	409.7
kanogan	Conconully Reservoir	13.0	11.2	10.6	7.4	7.6
kanogan	Salmon Lake	10.5	9.0	9.5	8.0	8.7
helan	Lake Chelan	676.1	195.2	205.1	192.6	210.0
		YAKIMA				
akima	Keechelus Lake	157.8	127.0	106.1	98.4	120.6
aches	Kachess Lake	239.0	188.4	161.2	166.2	202.4
le Elum	Lake Cle Elum	436.9	310.0	171.6	228.0	323.2
umping	Bumping Lake	33.7	16.8	6.4	3.8	20.1
ieton	Rimrock Lake	198.0	152.2	64.5	112.2	154.1
		PUGET SOUND				
kagit	Ross Reservoir	1202.0	722.2	760.7	775.9	625.7
kagit	Diablo Reservoir	90.6	88.4	88.4	88.4	85.2
kagit	Gorge Reservoir	9.8	8.4	8.4	8.5	- -

1/ Based on Active Storage
* 15-year average 1953-67

SOIL MOISTURE - MAY

ainage Basin d ation	Number	Elev.	Profile Depth	(Inches): Total Capacity:	Soil Moisture Content (Inches) as of May 1 1973	1972	1971
AB CREEK							
ck Woods	18B3m	2750	48	13.6	8.3	9.4	10.2
ause	18B4m	2420	48	13.6	8.6	8.9	9.7
effels	18B5m	2380	48	13.6	9.3	9.5	9.5
erman	18B7m	2440	48	13.6	7.5	8.7	8.8
eatridge	18B6m	2290	48	13.6	7.4	10.0	10.4
ANOGAN							
lmon Meadows	19A2M	4500	48	5.4	3.7	3.8	3.8
out Creek	3-M	3600	48	7.3	3.6	5.6	4.0
KIMA							
nery Flat	21B20m	2200	48	6.9	Late Report	4.8	4.8
ke Cle Elum	21B14M	2200	48	12.8	Late Report	9.1	9.2
LLA WALLA							
use	17C3m	3650	48	11.1	7.4	10.5	10.0
lmers	17C2M	4400	48	12.0	9.9	10.7	10.2
NATCHEE							
per Wheeler	20B7M	4400	48	12.7	9.2	12.2	11.4

FALL SOIL MOISTURE

ainage Basin d ation	Number	Elev.	Profile Depth	(Inches): Total Capacity:	Soil Moisture Content (Inches) as of Oct. 1 1972	1971	1970
AB CREEK							
cks Woods	18B3m	2750	48	13.6	5.6	5.3	7.0
ause	18B4m	2420	48	13.6	6.2	5.0	4.4
effels	18B5m	2380	48	13.6	6.5	5.3	4.4
erman	18B7m	2440	48	13.6	4.6	4.0	3.8
eatridge	18B6m	2290	48	13.6	6.2	5.5	7.8
ANOGAN							
lmon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7
out Creek	3-M	3600	48	7.3	3.3	3.3	3.4*
KIMA							
mery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4
ke Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6
LLA WALLA							
use	17C3m	3650	48	11.1	6.0	6.2	5.9
lmers	17C2M	4400	48	12.0	7.7	8.2	7.3
NATCHEE							
per Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1

November 1 measurement

PRECIPITATION 1/

Division Averages and Departures

rainage ivisions	FALL Sept-Oct 1971 2/ Observed	Departure	WINTER Nov.-1972--Mar.-1973 Observed	Departure	SPRING April--1973 Observed	Departure
olumbia in Canada	4.15	+ 0.26	9.74	- 2.95	0.99	- 0.39
end Oreille - Spokane	2.68	- 1.20	13.23	- 5.02	1.17	- 1.16
ortheastern Washington	2.16	- 0.09	8.58	- 2.51	0.77	- 0.66
outheastern Washington	2.35	- 0.30	10.01	- 2.40	0.80	- 1.08
entral Washington	3.48	- 0.96	18.98	- 8.15	0.46	- 1.75
orth Central Washington	1.04	- 0.37	4.70	- 1.64	0.15	- 0.62
orthwest Slope Cascades	10.41	- 1.26	39.43	-12.71	3.02	- 2.89
outhwest Slope Cascades	6.56	- 1.16	29.75	-11.12	2.28	- 2.05

ortheastern Washington - Lower Spokane, Colville, Sanpoil and lower Kettle drainages.

outheastern Washington - Touchet, Tucannon and Palouse drainages.

entral Washington - Yakima, Wenatchee and Chelan drainages.

orth Central Washington - Methow and Okanogan drainages.

orthwest Slope Cascades - Puget Sound drainages.

outhwest Slope Cascades - Lower Columbia drainages.

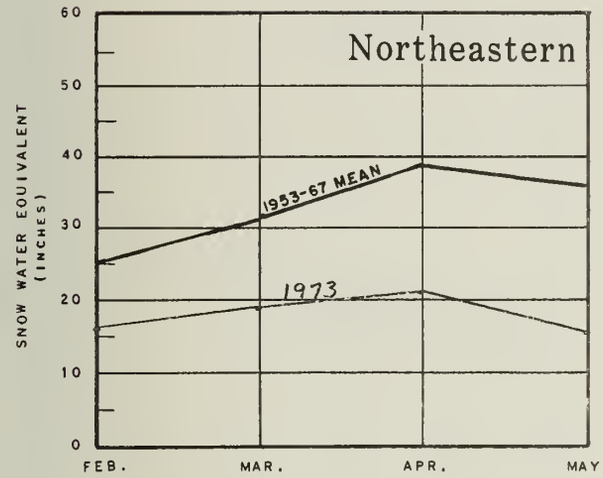
/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

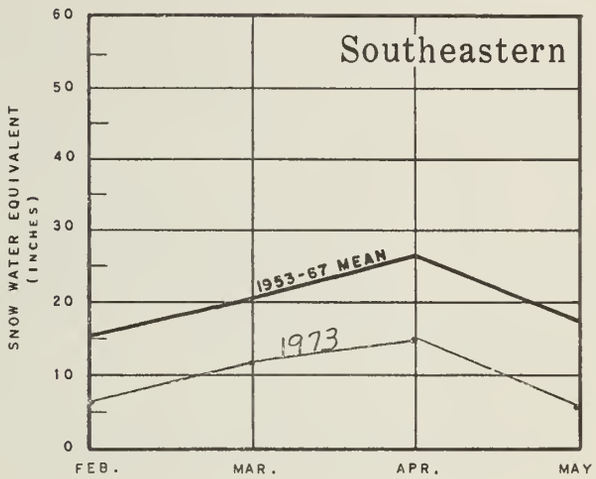
/ - Departure from 15-year (1953-67) drainage division average.

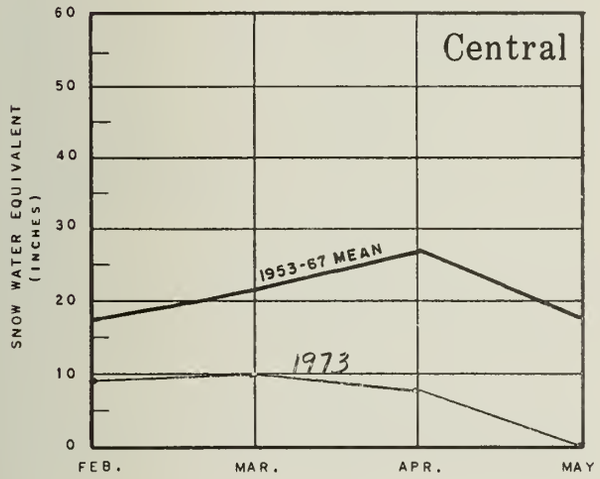
WASHINGTON SNOW COVER

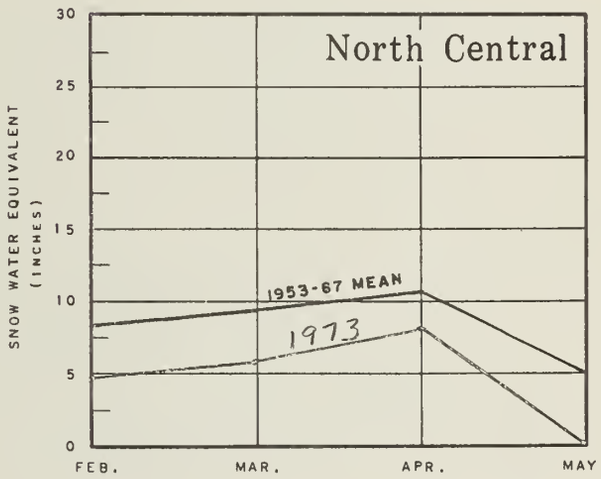
1973

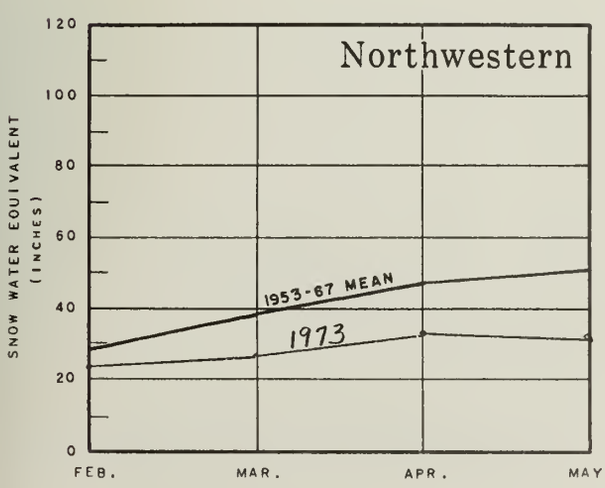
DRAINAGE AREAS

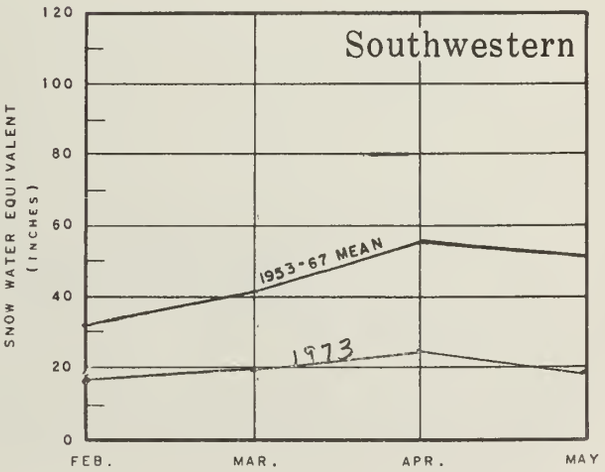










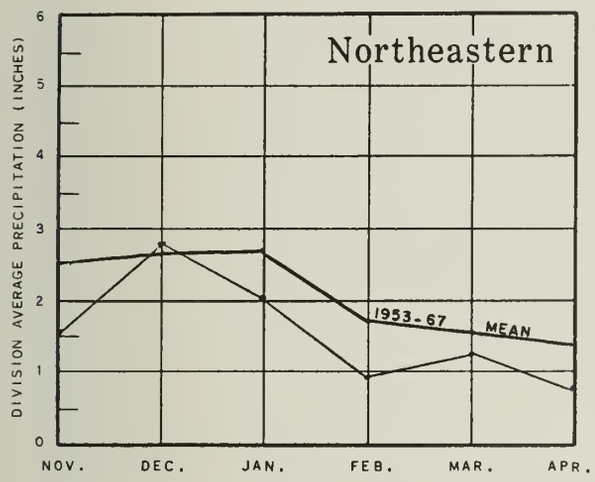


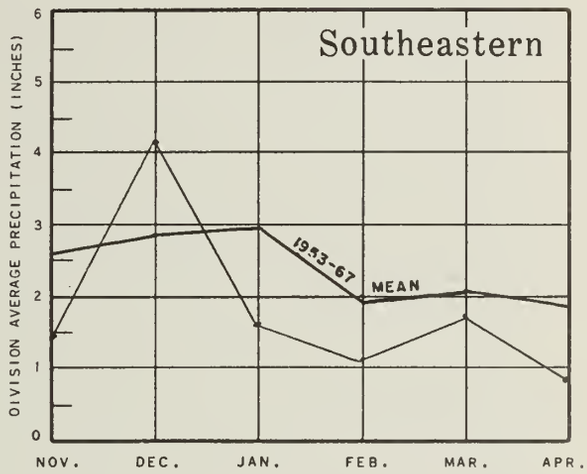
Selected Snow Survey Courses by Soil Conservation Service

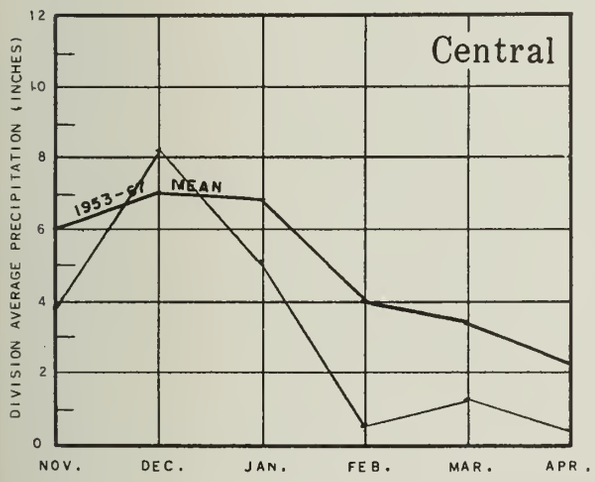
WASHINGTON VALLEY PRECIPITATION

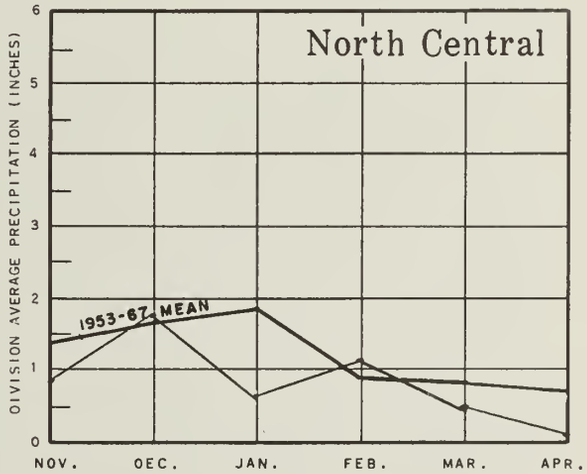
1972 - 1973

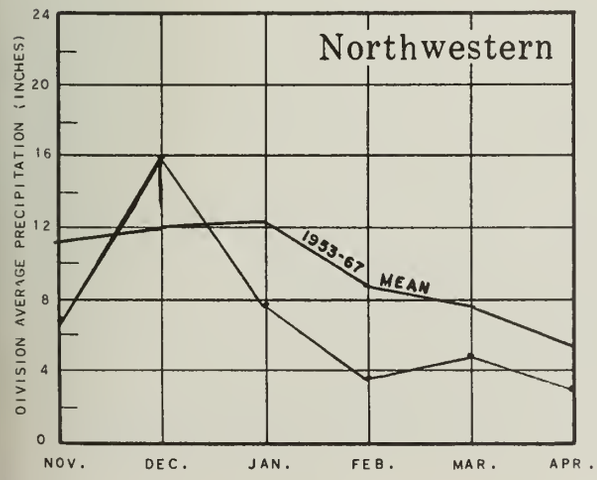
DRAINAGE AREAS

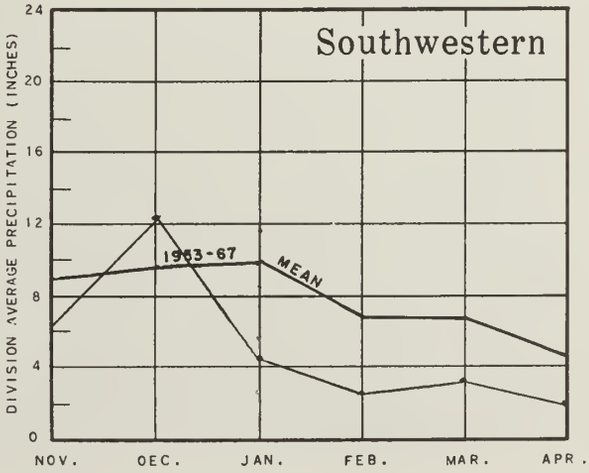












Preliminary Analysis by National Weather Service

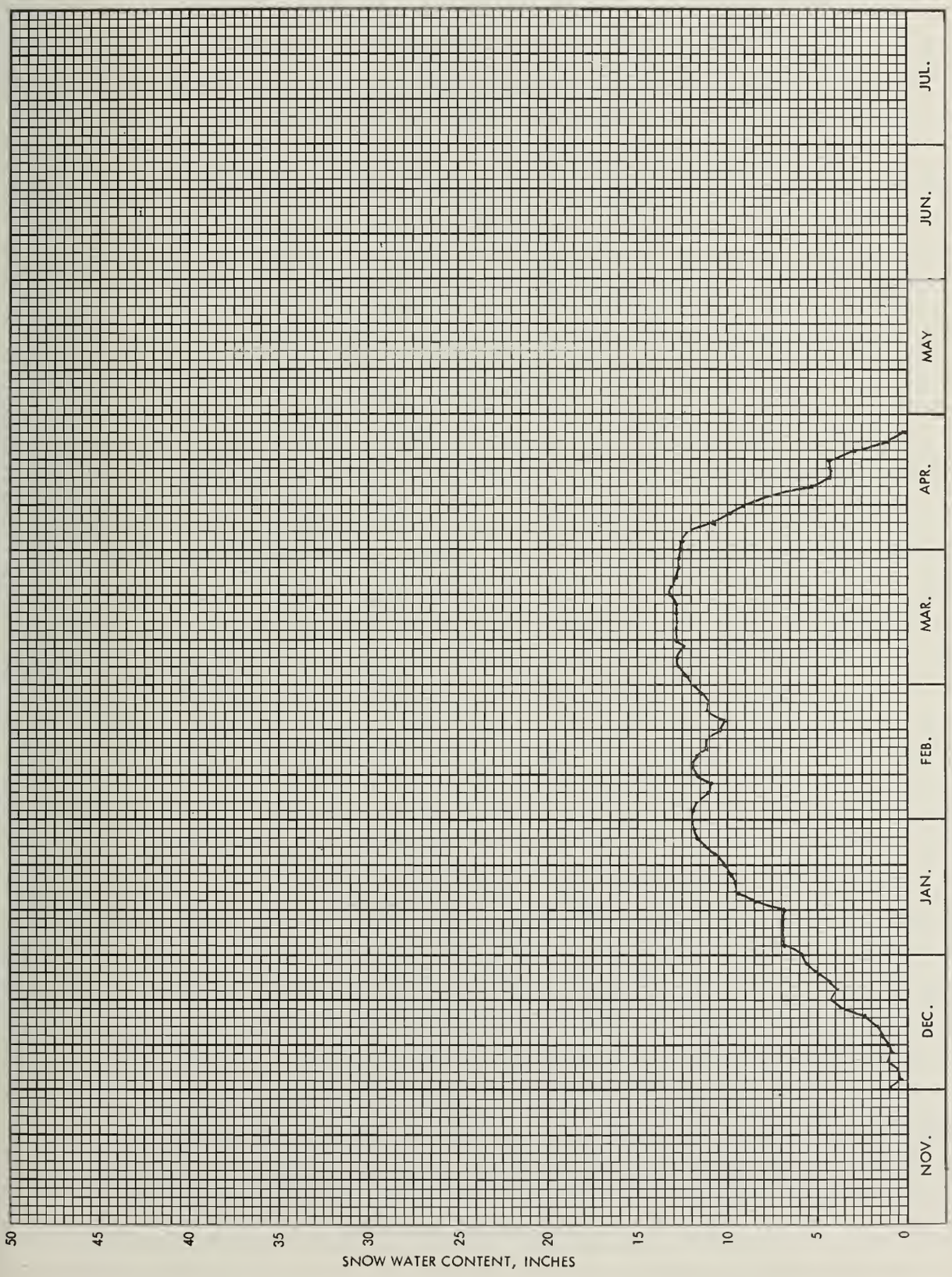
SNOW PILLOW DATA

1972 - 1973

Berne-Mill Creek

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42' Elev. 3240'



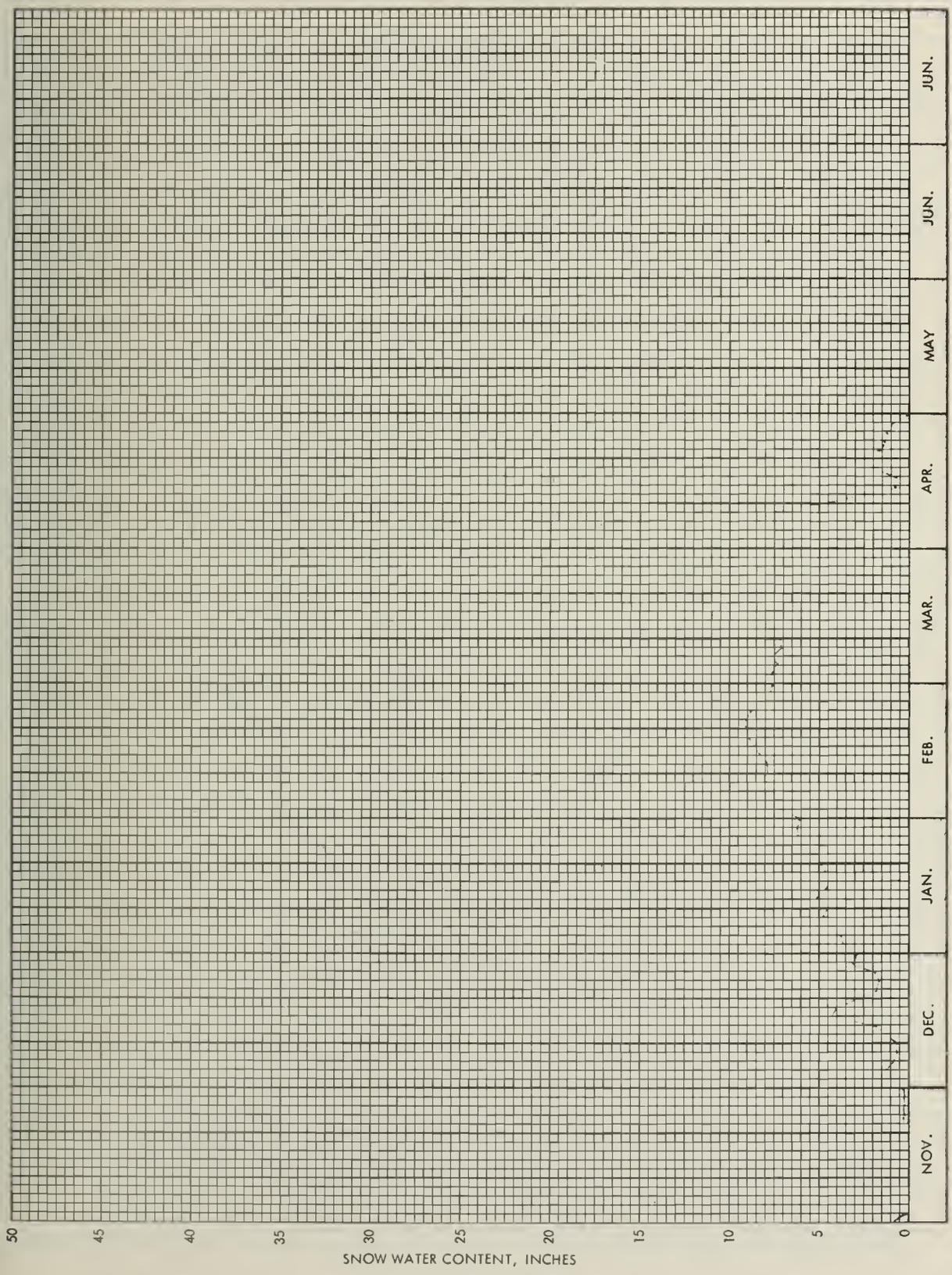
SNOW PILLOW DATA

1972 - 1973

Cougar Mountain - FS

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 121° 40' Elev. 3200'



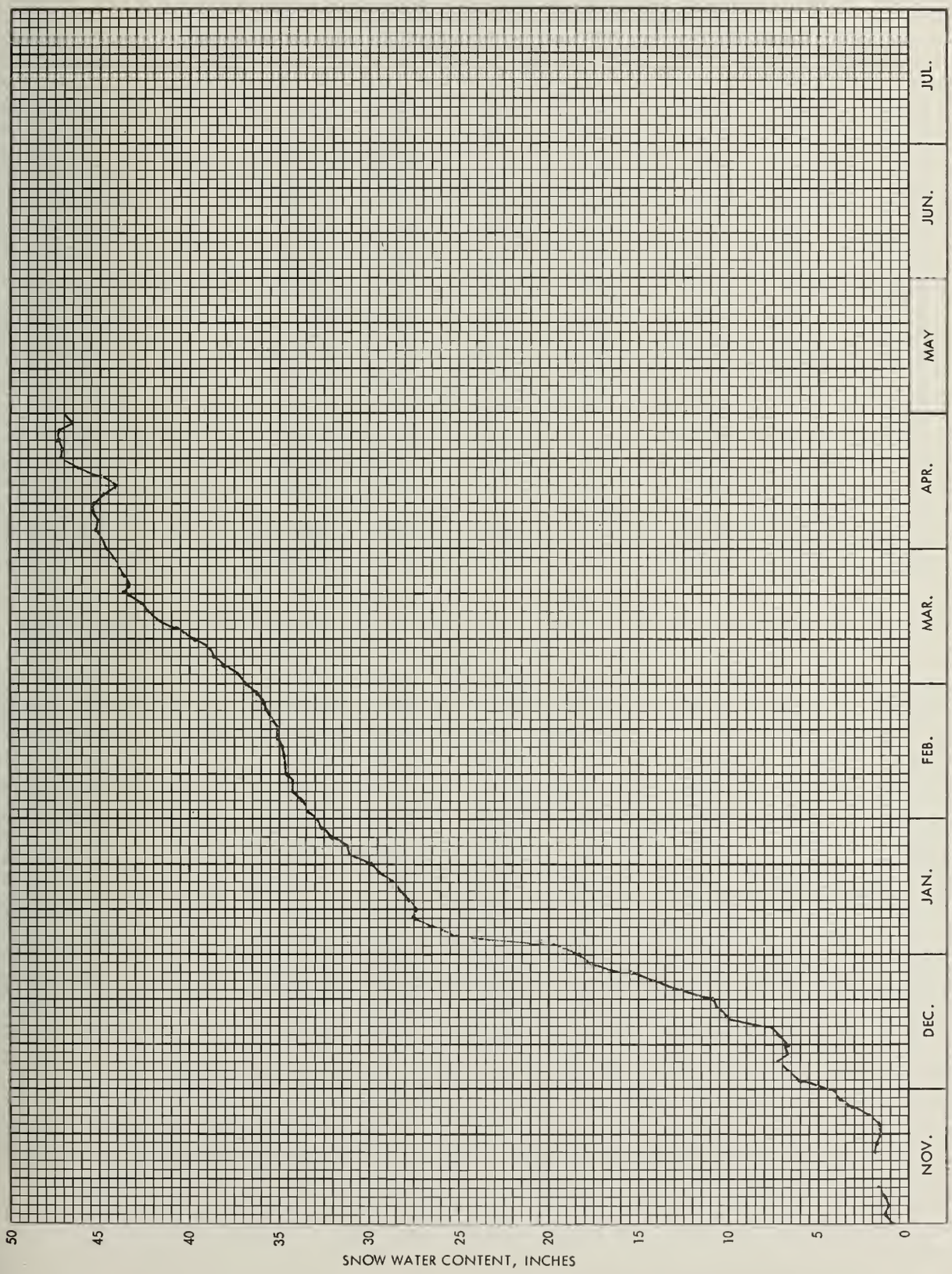
SNOW PILLOW DATA

1972 - 1973

Snowshoe Butte - FS

Sec. 28 T. 21N R. 9E No. 21B4S9P Drainage: Green River

Lat. 47° 13' Long. 121° 22' Elev. 5000'



WSFB-X4-L

SNOW DATA TO MAY 1, 1973 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	5/1	62	26.6	69.3	48.4
Baree Midway	15B16	4600	5/1	43	18.0	49.7	35.8
Baree Trail	15B15	3800	5/1	0	0.0	1.8	1.0
Benton Meadow	16A02	2344	5/1	0	0.0	0.0	0.0
Benton Spring	16A03	4900	5/1	21	9.4	19.2	17.1
Boyer Mountain	17A02	5250	4/27	41	17.6	30.0	25.2
Brush Creek	14A04	5000	5/1	15	5.0	13.7	10.8
Bunchgrass Meadow	17A01	5000	4/27	54	24.8	36.0	30.4
Heart Lake Trail	14C10	4800	5/1	5	1.6	38.7	17.2
Hoodoo Basin	15C10	6000	5/1	78	34.8	88.0	55.8
Hoodoo Creek	15C01	5900	5/1	75	31.6	85.9	52.0
Lookout	15B02	5250	4/16	50	19.2	57.1	- -
			5/1	39	16.8	54.0	36.7
Mosquito Ridge SP	16A04A	5100	5/1	-	23.0	47.0	- -
Nelson	19-Can	3050	4/27	11	4.2	11.4	7.0
Schweitzer Bowl	16A06	4500	5/1	28	12.8	32.7	- -
Schweitzer Ridge			5/1	83	36.7	57.8	- -
Smith Creek	16A01	4800	5/1	72	33.4	59.8	49.4
Winchester Creek	17A03	2970	4/27	0	0.0	0.0	0.5
KETTLE RIVER							
Barnes Creek	90-Can	5300	4/30	42	15.9	29.2	21.7*
Big White Mtn.	154-Can	5500	4/28	43	16.6	26.4	22.0*
Bluejoint Mtn.	244-Can	7500	Not Measured			New Course	
Boulder Road	18A02	1450	4/26	0	0.0	0.0	0.0
Butte Creek	18A03	4070	4/26	13	4.9	4.7	5.5
Cabin Creek	18A08	3170	4/26	0	0.0	2.0	1.4
Carmi	126-Can	4100	4/28	0	0.0	6.8	1.5*
Farron # 1	17-Can	4000	4/27	20	7.9	13.1	7.9*
Farron # 2	243-Can	4000	4/27	20	7.1	New Course	
Goat Creek	18A04	3595	4/26	0	0.0	0.0	- -
Graystoke Lake	5-Can	5950	4/27	50	18.4	- -	- -
Monashee Pass	48A-Can	4500	4/30	28	10.5	19.9	13.6*
Old Glory Mtn.	42-Can	7000	4/28	66	26.8	40.1	30.6*
Snow Caps Creek	18A05	2150	4/26	0	0.0	0.0	- -
Snow Caps Trail	18A06	2720	4/26	0	0.0	0.0	- -

Average based on 1953-67 average
* Average for years of record

USDA SCS-PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1973 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
KETTLE RIVER (Cont.)							
Summit G. S.	18A07	4600	4/26	16	4.7	- -	6.3
Trapping Creek Upper	165-Can	4450	4/28	11	3.9	11.7	5.8*
SPOKANE RIVER							
Above Burke	15B08	4100	5/1	9	3.0	32.1	- -
Copper Ridge	16B02	4800	4/30	0	0.0	40.3	27.8
Forty-nine Meadows	15B03	5000	4/25	25	10.0	43.5	30.6
Fourth of July Summit	16B03	3100	4/16	0	0.0	- -	- -
			5/1	0	0.0	0.0	- -
Granite Peak	15B13A	6000	4/25	75	30.9	89.3	- -
Kellogg Peak	16B05A	5560	5/1	32	13.8	- -	- -
Lookout	15B02	5250	4/16	50	19.2	57.1	- -
			5/1	39	16.8	54.0	36.7
Lost Lake	15B14A	6000	4/25	86	35.6	105.3	62.7
Lower Sands Creek	16B01	3400	4/30	0	0.0	28.0	14.6
Medicine Ridge	15B04A	6150	4/25	76	31.2	77.1	- -
Mosquito Ridge SP	16A04A	5110	5/1	-	23.0	47.0	- -
Outlaw Creek	15B12A	3750	Discontinued			0.0	8.0
Roland Summit	15B05A	5200	5/1	30	12.9	- -	- -
Sherwin	16C01	3200	4/27	0	0.0	18.4	- -
Sunset	15B09A	5600	5/1	39	16.8	- -	- -
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	5/2	6	1.5	4.2	1.7*
Blackwall Peak	100-Can	6250	Late Report			58.0	39.8*
Bouleau Creek	31-Can	5000	4/30	18	6.5	14.7	- -
Bouleau Lake	234-Can	4580	4/29	34	6.9	18.2	- -
Brenda Mine	193-Can	4800	4/27	17	5.9	20.7	- -
Brookmere	27-Can	3200	4/30	5	2.1	16.5	6.0*
Clark +	19A08a	7000	Not Measured			48.3	24.4
Enderby	130-Can	6250	4/27	106	31.1	55.0	43.6*
Esperon Creek Lower	164-Can	4400	4/28	17	6.8	14.6	12.0*
Esperon Creek Middle	163-Can	4700	4/28	22	8.5	18.9	15.4*
Esperon Creek Upper	162-Can	5400	4/28	35	12.3	24.1	22.4*
Freezeout Meadows New	20A38	5000	4/26	50	20.9	39.2	- -
Graystoke Lake	5-Can	5950	4/27	50	18.4	37.0	31.2*
Hamilton Hill	107-Can	4900	4/28	21	7.9	33.0	13.8*

Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

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SNOW DATA TO MAY 1, 1973 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Harts Pass	20A05A	6500	4/26	71	32.4	71.3	49.8
Isintok Lake	152-Can	5510	4/28	16	4.8	17.2	7.6*
Lost Horse Mountain	105-Can	6300	5/1	26	8.2	21.8	10.9*
McCulloch	4-Can	4200	4/28	4	1.0	6.1	3.0*
Missezula Mountain	106-Can	5100	Late Report				
Mission Creek	5A-Can	6000	4/27	47	17.4	30.0	21.9*
Monashee Pass	48A-Can	4500	4/30	28	10.5	19.9	13.6*
Mount Kobau	156-Can	5950	4/30	26	7.7	17.6	14.6*
Mutton Creek No. 1	19A01	5700	4/27	0	0.0	23.0	10.0
Mutton Creek No. 2	19A04	6000	4/27	24	9.5	24.0	15.1
Mutton Creek No. 2 SP	19A11SP	6000	4/27	-	6.7	- -	- -
New Copper Mountain	46A-Can	4300	4/28	0	0.0	6.0	4.0*
New Penticton Res. #2	183-Can	5225	4/30	20	5.8	15.2	- -
Nickel Plate Mtn.	47-Can	6200	4/29	18	5.0	17.0	9.0*
Oyama Lake	203-Can	4400	4/29	7	2.2	7.3	4.8*
Postill Lake	55-Can	4500	4/30	17	5.2	10.6	6.9*
Quartette Lake	34-Can	4000	4/29	21	6.6	23.6	- -
Rusty Creek	19A03	4000	4/27	0	0.0	0.0	1.3
Salmon Meadows	19A02	4500	4/27	0	0.0	10.7	5.0
Silver Star Mountain	99-Can	6050	4/29	63	26.0	44.2	28.7*
Summerland Reservoir	3A-Can	4200	Not Measured			14.4	- -
			4/29	12	3.7	14.5	7.7
Trout Creek	3-Can	4700	4/27	9	2.8	15.2	5.3*
Vaseux Creek	233-Can	4600	4/30	0	0.0	7.0	4.3*
White Rocks Mountain	70-Can	6000	4/27	47	18.4	35.9	33.2*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	4/27	46	23.0	New Aerial	
Entiat Meadows +	20A33a	4800	4/27	50	25.0	61.2	37.0
Entiat River Trail +	20A34a	3150	4/27	0	0.0	14.4	9.0
Four Mile Ridge +	20B27a	7000	4/27	40	20.0	55.1	- -
Fox Camp +	20A36a	6510	4/27	80	40.0	92.8	57.6
Pope Ridge	20B20	4300	4/30	0	0.0	16.2	8.3
Pugh Ridge +	20A32a	6400	4/27	53	26.5	63.8	34.7
Shady Pass	20A37	5000	4/30	28	14.3	54.2	- -
Snow Brushy +	20A35a	3850	4/27	29	14.5	51.5	27.5
Tommy Creek +	20B21a	5300	4/27	15	7.5	30.6	21.2

Average based on 1953-67 average
* Average for years of record
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1973 - APPENDIX 4

OW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
METHOW RIVER							
rts Pass	20A05A	6500	4/26	71	32.4	71.3	49.8
up Loup	19A07	4650	Not Measured			6.2	- -
tton Creek No. 1	19A01	5700	4/27	0	0.0	23.0	10.0
tton Creek No. 2	19A04	6000	4/27	24	9.5	24.0	15.1
tton Creek No. 2 SP	19A11SP	6000	4/27	-	6.7	- -	- -
sty Creek	19A03	4000	4/27	0	0.0	0.0	1.3
lmon Meadows	19A02	4500	4/27	0	0.0	10.7	5.0
CHELAN LAKE BASIN							
eenwood Flat +	20A25a	3540	Not Measured				
ttle Meadows +	20A24a	5275	Not Measured				
man Lake	20A23A	5900	Not Measured				
rk Creek Flat +	20A13a	2220	Not Measured				
rk Creek Ridge	20A12A	4600	Not Measured				
tersons +	20A16a	3730	Not Measured				
iny Pass	20A09	4780	4/27	74	33.0	69.0	43.9
fety Harbor	20A30A	6300	4/25	40	17.3	51.1	30.2
WENATCHEE RIVER							
rne-Mill Creek	21B23	2925	4/30	8	3.8	43.5	18.2*
rne-Mill Creek New SP	21B41SP	3240	4/30	0	0.0	28.2	- -
ewett Pass No. 2	20B02	4270	4/11	10	4.2	31.8	12.1
			4/27	0	0.0	27.5	8.9
iwaukum G. S.	20B16	1810	4/30	0	0.0	11.6	- -
sh Lake	21B04	3371	4/26	10	3.8	56.1	24.1
ke Wenatchee	20B05	1970	4/30	0	0.0	14.4	- -
avenworth R. S.	20B17	1127	4/30	0	0.0	0.0	- -
nan Lake	20A23A	5900	Not Measured				
rritt	20B18	2140	4/30	0	0.0	19.8	- -
evens Pass	21B01	4070	4/12	78	32.9	78.1	55.7
			4/30	68	31.4	92.8	53.5
evens Pass Sand Shed	21B45	3700	4/12	38	16.7	52.5	- -
			4/30	28	12.2	55.3	- -

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

PORTLAND OREGON 1973.

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SNOW DATA TO MAY 1, 1973 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	4/25	0	0.0	4.3	- -
Scout-A-Vista	20B04	3400	4/25	0	0.0	0.0	- -
STEMILT CREEK							
Jump-Off	20B08	4450	4/26	0	0.0	8.0	- -
Stemilt Slide	20B06	5000	4/26	0	0.0	14.0	4.0
Upper Wheeler	20B07	4400	4/26	0	0.0	0.0	- -
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	4/27	0	0.0	17.3	- -
Colockum Creek Lower	20B23	4300	4/27	0	0.0	1.8	- -
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	Not Measured			0.0	0.0
Big Boulder Creek	21B09	3200	4/26	0	0.0	23.6	5.0
Blewett Pass No. 2	20B02	4270	4/11	10	4.2	31.8	12.1
			4/27	0	0.0	27.5	8.9
Bumping Lake	21C08	3450	4/12	7	3.4	19.5	13.3
			5/1	0	0.0	16.2	9.3
Bumping Lake New	21C36	3400	4/12	15	7.6	26.9	- -
			5/1	0	0.0	23.6	- -
Cayuse Pass	21C06	5300	4/26	120	53.9	139.1	- -
Fish Lake	21B04	3371	4/26	10	3.8	56.1	24.1
Grouse Camp	20B11	5385	Not Measured				
High Creek	20B12	2930	Not Measured				
Joe Lake +	21B46a	4624	4/25	75	33.8	2/	- -
Lemah Creek +	21B47a	3327	4/25	36	16.2	64.3	- -
Morse Lake	21C17	5400	4/30	79	39.8	87.8	62.4
Olallie Meadows	21B02	3625	4/18	55	19.2	79.2	51.0
			4/30	40	18.2	81.8	48.1
Stampede Pass SP	21B10	3860	4/17	-	23.4	43.8	48.6
			4/30	-	22.2	48.1	46.0
Tunnel Avenue	21B8	2450	4/13	9	4.3	35.3	21.5
			5/1	0	0.0	32.4	17.4
Van Epps Pass +	20B26a	5925	4/25	74	33.3	2/	- -
Waptus Lake +	21B49a	3024	4/25	30	13.5	65.8	- -

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation
2/ Aerial Marker Buried

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SNOW DATA TO MAY 1, 1973 - APPENDIX 6

IOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
ite Pass (E. Side)	21C28	4500	4/13	25	10.2	50.9	27.8
			Late Report			51.9	26.2
ite Pass (L. Lake)	21C27	4500	Not Measured		- -	- -	29.6
			4/26	18	8.6	55.0	28.0
L O W E R C O L U M B I A							
ASOTIN CREEK							
ruce Springs	17C04	5700	4/30	21	9.4	35.3	- -
WHITE SALMON RIVER							
ltus Creek	21C12	4000	4/26	46	21.9	69.9	47.8
rprise Lakes	21C13A	4250	4/26	39	18.5	88.7	50.5
WIND RIVER							
ld Man Pass	21D19	3100	4/26	0	0.0	25.7	11.4
LEWIS RIVER							
lue Lake +	21C22a	4800	4/26	114	53.5	144.0	90.1
ob's Trail	21C21	2200	4/26	0	0.0	20.0	5.7
alamity Ridge +	22D1a	2500	4/26	0	0.0	1.0	- -
uncil Pass +	21C18a	4200	4/26	36	16.9	69.4	35.4
ltus Creek	21C12	4000	4/26	46	21.9	69.9	47.8
ivide Meadow +	21C29a	5600	4/26	73	34.3	112.8	61.6
rand Meadow	21C25	3500	4/26	2	1.1	38.2	22.2
ne Pine Shelter	21C26	3800	4/26	45	20.3	63.9	45.3
rble Mountain +	22C05a	3200	4/26	8	4.3	52.0	31.3
squito Meadows	21C19	4100	4/26	48	21.7	65.2	- -
w Muddy River	22C06	1400	4/26	0	0.0	0.0	- -
d Man Pass	21D19	3100	4/26	0	0.0	25.7	11.4
ains of Abraham +	22C1a	4400	4/26	97	45.6	103.0	73.8
ith Creek Road	22C04	2100	4/26	0	0.0	15.2	- -
encer Meadow +	21C20a	3400	4/26	0	0.0	30.4	13.0
rprise Lakes	21C13A	4250	4/26	39	18.5	88.7	50.5
ble Mountain +	21C24a	4200	4/26	48	22.1	74.0	44.7
mbered Peak +	21D18a	3000	4/26	0	0.0	11.8	12.3

Average based on 1953-67 average
+ Snow water equivalent estimated from aerial stadia observation

PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1973 - APPENDIX 7

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average *
COWLITZ RIVER							
ayuse Pass	21C06	5300	4/26	120	53.9	139.1	- -
osquito Meadows	21C19	4100	4/26	48	21.7	65.2	- -
igtail Peak	21C33	5900	4/13	81	36.5	124.7	- -
lains of Abraham +	22C01a	4400	4/26	97	45.6	103.0	73.8
otato Hill	21C14	4500	4/26	29	12.8	52.5	- -
hite Pass (E. Side)	21C28	4500	4/13	25	10.2	50.9	27.8
			Late Report			51.9	26.2
hite Pass (L. Lake)	21C27	4500	4/26	18	8.6	55.0	28.0
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
host Forest	21C04	4550	4/26	47	22.2	88.5	- -
ongmire	21C03	2760	4/26	0	0.0	17.7	- -
ew Paradise Park	21C35	5500	4/26	107	47.8	130.2	- -
tem Glade	21C01	5050	4/26	95	43.0	123.2	- -
WHITE RIVER							
ayuse Pass	21C06	5300	4/26	120	53.9	139.1	- -
orse Lake	21C17	5400	4/30	79	39.8	87.8	62.4
GREEN RIVER							
ougar Mountain SP	21B42SP	3200	4/30	0	0.0	23.4	- -
nowshoe Butte SP	21B43SP	5000	4/30	81	42.6	101.7	- -
tampede Pass SP	21B10	3860	4/17	-	23.4	43.8	48.6
			4/30	-	22.2	48.1	46.0
SNOQUALMIE RIVER							
lallie Meadows	21B02	3625	4/18	55	19.2	79.2	51.0
			4/30	40	18.2	81.8	48.1
SKYKOMISH RIVER							
tevens Pass	21B01	4070	4/12	78	32.9	78.1	55.7
			4/30	68	31.4	92.8	53.5
tevens Pass S. Shed	21B45	3700	4/12	38	16.7	52.5	- -
			4/30	28	12.2	55.3	- -

* Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation

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SNOW DATA TO MAY 1, 1973 - APPENDIX 8

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average ¶
SKAGIT RIVER							
Beaver Creek Trail	21A06	2200	4/26	0	0.0	11.7	5.6
Beaver Pass	21A01	3680	4/26	38	16.4	50.6	35.0
Brown Top	21A28a	6000	4/26	111	47.8	104.4	- -
Cloudy Pass	20A22a	6500	Not Measured				
Devils Park	20A04	5900	4/26	78	34.9	74.8	49.2
Freezeout Cr. Trail	20A01	3500	4/26	8	4.2	19.0	8.3
Freezeout Meadows New	20A30	5000	4/26	50	20.9	39.2	- -
Granite Creek	21A29	3500	4/27	11	4.6	28.6	- -
Harts Pass	20A05A	6500	4/26	71	32.4	71.3	49.8
Hozomeen Lake	21A02	2600	4/26	0	0.0	9.9	5.8
Klesilkwa	35B-Can	3700	4/29	4	1.4	29.6	- -
Lyman Lake +	20A23A	5900	Not Measured				
Meadow Cabins	20A08	1900	4/28	0	0.0	3.8	2.0
New Hozomeen Lake	21A30	2800	4/26	0	0.0	13.0	- -
New Tashme	26A-Can	2500	Not Measured			17.1	- -
Quartette Lake	34-Can	4000	4/29	21	6.6	23.6	- -
Rainy Pass	20A09	4780	4/27	74	33.0	69.0	43.9
Thunder Basin	20A07	4200	4/28	43	14.3	36.8	26.9
BAKER RIVER							
Baker Pass +	21A27a	4900	4/28	156	70.2	- -	- -
Dock Butte	21A11A	3800	4/17	134	59.0	- -	86.4
			4/28	119	54.0	110.0	87.1
Easy Pass	21A07A	5200	4/17	132	58.0	- -	- -
			4/28	148	66.5	125.6	107.4
Jasper Pass	21A06A	5400	4/17	178	78.0	- -	102.6
			4/28	163	71.8	134.0	113.6
Komo Kulshan	21A17	800	4/28	0	0.0	3.8	- -
Marten Lake	21A09A	3600	4/17	143	63.0	- -	92.3
			4/28	132	60.3	118.5	93.3
Mount Blum +	21A18a	5800	4/17	154	68.0	- -	- -
			4/28	142	63.9	- -	- -
Panorama New	21A26	4300	4/16	130	58.7	86.4	- -
			5/1	116	57.5	110.3	- -
Rocky Creek	21A12A	2100	4/17	40	18.0	- -	31.8
			4/28	19	8.7	43.7	20.4
Schreibers Meadow	21A10A	3400	4/17	96	42.0	- -	70.5
			4/28	102	45.4	89.6	73.7

¶ Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation

PORTLAND OREGON 1973

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SNOW DATA TO MAY 1, 1973 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER (Cont.)							
S. F. Thunder Creek	21A14A	2200	4/17	3	1.0	- -	- -
			4/28	0	0.0	0.0	- -
Sulphur Creek	21A13	1600	4/28	0	0.0	19.9	- -
Three Mile Creek	21A15	4500	4/28	0	0.0	0.0	- -
Watson Lakes	21A08A	4500	4/17	134	59.0	- -	79.7
			4/28	116	49.6	114.4	83.6
NOOKSACK RIVER							
Glacier Creek	21A23	3700	Not Measured			40.0	- -
Panorama New	21A26	4300	4/17	130	58.7	86.4	- -
			5/1	116	57.5	110.3	- -
OLYMPIC PENINSULA							
DUNGENESS RIVER							
Deer Park	23B04	5200	4/29	35	14.3	33.1	24.3
MORSE CREEK							
Cox Valley	23B14	4500	4/27	65	27.9	51.5	- -
ELWHA RIVER							
Hurricane	23B03	4500	4/26	36	13.8	34.4	28.0
SKOKOMISH RIVER							
Black & White	23B07	4200	4/26	71	31.2	59.5	- -
Black & White Lakes	23B06	4700	4/26	106	53.2	91.2	- -
Home Sweet Home	23B05	5200	4/26	138	64.3	116.0	- -

Average based on 1953-67 average

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Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
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WATER SUPPLY OUTLOOK FOR WASHINGTON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF
JUNE 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each yeor.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevado 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

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WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201

WATER SUPPLY OUTLOOK

State of Washington
June 1, 1973

The water supply picture in the State of Washington and tributary basins has gone from bad to worse. Forecasts made last month will probably not be realized unless there is a dramatic change in the weather patterns and the National Weather Service's thirty day outlook does not indicate that this will occur. At the present time the only snow left in the watersheds is at the high elevations and in the exceeding north portion of the Columbia Basin in Canada. The snow, for all practical purposes, is gone from Washington without any significant runoff occuring. Admittedly, there are very few snow courses measured on May 15 and even fewer on the first of June, but those that were measured indicate near record low snow packs. Only 1962 had less snow, but in that year there was a significant amount of precipitation measured during May. Runoff during the month was all well below normal, as was precipitation. The only redeeming factor in the precipitation story was that it was not as poor as measured during April. The reservoir story is also generally below normal, with only two small reservoirs in the Okanogan Drainage Basin having above normal amounts of water in storage as of June 1, and the power reservoir, Ross, in the Skagit Drainage indicating slightly more than normal amounts of water in storage.

SNOW COVER

Of the few snow courses that were measured on June 1 that had measureable amounts of snow, the following gives the comparison to average. Pend Oreille - the snow pack as of June 1 is 35% of 1972, 40% of 1971 and 47% of long term normal. In the Kettle River Drainage, the high elevation snow courses indicate the snow cover to be 58% of last year, 80% of 1971 and 85% of normal. A very poor snow pack lies in the Spokane River Drainage, 17% of last year and 23% of 1971. In the Okanogan River Drainage, the snow cover is 35% of last year and 62% of 1971 and average. The only other snow course, Stevens Pass, lies on the pass between the Wenatchee River and the Skykomish. This snow course indicates the snow cover in that area to be 12% of last year, 16% of 1971 and 30% of average.

RESERVOIRS

As mentioned above, most reservoirs have less than normal amounts of water in storage as of June 1. The situation in the Yakima Basin is that it is expected that none of the five reservoirs will fill with the spring runoff. The power reservoirs such as Franklin D. Roosevelt and Ross Reservoir could fill with the expected runoff, but power demands might hold these reservoirs down. Some reservoirs, such as Chelan, will probably be filled to satisfy recreational needs of the area at the expense of power production.

PRECIPITATION

During the month of May, rainfall was normal or above on the west slopes of the Cascades and very near normal in the Columbia portion of the basin in Canada. The other drainage divisions, as reported by the National Weather Service, had much better rainfall than has been measured the last three months, with only the north central portion of the state reporting near 50% of average. In spite of the rains during May, the deficit of the previous months is in no way made up and winter and spring rainfall has all been well below average.

STREAMFLOW

Forecasts of streamflow are not made by the Soil Conservation Service for any streams as of June 1. If they were made, it is expected that the forecasts would be lowered percentagewise from that reported last month. Runoff during the month was all well below normal with the Columbia River at Birchbank having the greatest amount of runoff - percentagewise - 93%. The low basin, and one that is critically short of water in the hills, is in the Blue Mountains. The Walla Walla River measured at Touchet at only 16% normal runoff during May. It was expected that the Palouse River would have less water due to the lack of snow packs in the Moscow mountains, but the flow of this river was 25% of normal. At Kiona, the flow of the Yakima River as corrected for storage and diversions was only 20% of normal and the Spokane at Post Falls, also corrected for storage, was 35%. Indications are that many streams such as the Spokane will have the lowest runoff of record unless well above normal precipitation occurs in the very near future.

RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE 1/ CAPACITY	(Measured - June) 1973	1972	1971	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	218.9	467.2	387.6	327.0
Columbia	Franklin D. Roosevelt Lake	5232.0	1808.5	1722.0	2703.6	3965.2
Columbia	Banks Lake	761.8	112.2	381.3	517.7	435.3
Okanogan	Conconully Reservoir	13.0	10.4	12.1	12.0	9.8
Okanogan	Salmon Lake	10.5	10.1	10.5	7.8	9.6
Chelan	Lake Chelan	676.1	436.7	481.3	461.4	467.6
		YAKIMA				
Yakima	Keechelus Lake	157.8	122.9	138.2	143.0	144.8
Kaches	Kachess Lake	239.0	173.1	209.8	222.2	228.9
Cle Elum	Lake Cle Elum	436.9	337.2	319.1	378.1	395.8
Bumping	Bumping Lake	33.7	27.8	31.0	17.5	30.6
Tieton	Rimrock Lake	198.0	131.8	129.3	146.3	180.4
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	1056.3	1315.6	1323.1	1000.5
Skagit	Diablo Reservoir	90.6	87.9	88.9	87.8	84.1
Skagit	Gorge Reservoir	9.8	8.1	8.7	8.4	---

1/ Based on Active Storage
* 15-year average 1953-67

SOIL MOISTURE - JUNE

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches) Total Capacity	Soil Moisture Content (Inches) as of June 1 1973	1972	1971
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	7.7	10.2	9.6
Krause	18B4m	2420	48	13.6	8.7	9.0	8.7
Sheffels	18B5m	2380	48	13.6	8.3	9.9	9.1
Sherman	18B7m	2440	48	13.6	7.2	9.1	8.2
Wheatridge	18B6m	2290	48	13.6	6.0	10.0	--
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	3.7	3.7	3.6
Trout Creek	3-M	3600	48	7.3	Late Report	5.4	4.5
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	Late Report	4.5	4.5
Lake Cle Elum	21B14M	2200	48	12.8	Late Report	9.2	9.2
WALLA WALLA							
Couse	17C3m	3650	48	11.1	Late Report	10.2	9.8
Helmers	17C2M	4400	48	12.0	Late Report	10.9	10.1
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	9.0	9.8	9.9

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches) Total Capacity	Soil Moisture Content (Inches) as of Oct. 1 1972	1971	1970
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	5.6	5.3	7.0
Krause	18B4m	2420	48	13.6	6.2	5.0	4.4
Sheffels	18B5m	2380	48	13.6	6.5	5.3	4.4
Sherman	18B7m	2440	48	13.6	4.6	4.0	3.8
Wheatridge	18B6m	2290	48	13.6	6.2	5.5	7.8
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7
Trout Creek	3-M	3600	48	7.3	3.3	3.3	3.4*
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4
Lake Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6
WALLA WALLA							
Couse	17C3m	3650	48	11.1	6.0	6.2	5.9
Helmers	17C2M	4400	48	12.0	7.7	8.2	7.3
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1

* November 1 measurement

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct 1972 2/ Observed	Departure	WINTER Nov. '72-Mar.'73 2/ Observed	Departure	SPRING April-May '73 2/ Observed	Departure
Columbia in Canada	4.15	+ 0.26	9.74	- 2.95	2.73	- 0.41
Pend Oreille - Spokane	2.68	- 1.20	13.23	- 5.02	3.04	- 1.60
Northeastern Washington	2.16	- 0.09	8.58	- 2.51	2.28	- 1.04
Southeastern Washington	2.35	- 0.30	10.01	- 2.40	2.47	- 1.14
Central Washington	3.48	- 0.96	18.98	- 8.15	1.44	- 1.99
North Central Washington	1.04	- 0.37	4.70	- 1.64	0.74	- 1.06
Northwest Slope Cascades	10.41	- 1.26	39.43	-12.71	6.74	- 2.89
Southwest Slope Cascades	6.56	- 1.16	29.75	-17.12	5.09	- 1.95

Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse drainages.
Central Washington	- Yakima, Wenatchee and Chelan drainages.
North Central Washington	- Methow and Okanogan drainages.
Northwest Slope Cascades	- Puget Sound drainages.
Southwest Slope Cascades	- Lower Columbia drainages.

1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

2/ - Departure from 15-year (1953-67) drainage division average.

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APPENDIX 1
CORRECTIONS AND ADDITIONS - 1973 SNOW REPORTS

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
February 1							
LEWIS RIVER							
Mosquito Meadows	21C19	4100	2/1	53	15.4	49.9	28.8
Surprise Lakes	21C13A	4250	1/3	38	10.8	35.0	18.5
COWLITZ RIVER							
Pigtail Peak	31C33	5900	12/29	61	22.5	37.2	26.0
White Pass (L. Lake)	21C27	4500	12/29	17	5.7	18.9	13.3
NISQUALLY RIVER							
Stem Glade	21C01	5050	12/28	68	20.4	40.7	24.8
GREEN RIVER							
Lyman Lake	21B50	4000	12/29	16	3.2	23.5	- -
SKAGIT RIVER							
Thunder Basin	20A07	4200	1/27	42	11.2	27.4	- -
BAKER RIVER							
Rocky Creek	21A12A	2100	1/26	48	21.0	44.5	19.6
SKOKOMISH RIVER							
Black & White	23B07	4200	1/3	43	12.8	24.2	- -
March 1							
COWLITZ RIVER							
Packwood Lake	21C31	2870	2/27	5	2.0	30.1	12.0
CEDAR RIVER							
Mt. Washington New	21B52	3000	2/26	0	0.0	New Course	
SNOQUALMIE RIVER							
S. F. Tolt	21B18	1900	2/26	0	0.0	6.8	- -

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973

APPENDIX 2

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
March 1 (Cont.)							
BAKER RIVER							
Dock Butte	21A11A	3800	3/6	120	45.6	99.4	65.3
Easy Pass	21A07A	5200	3/6	110	41.8	114.7	82.1
Jasper Pass	21A06A	5400	3/6	158	60.0	125.5	87.3
Marten Lake	21A09A	3600	3/6	120	45.6	114.3	73.3
Mt. Blum +	21A18a	5800	3/6	125	47.5	-	-
Rocky Creek	21A12A	2100	3/6	30	11.4	53.1	23.3
Schreibers Meadow	21A10A	3400	3/6	72	27.4	79.2	58.1
S. F. Thunder Cr.	21A14A	2200	3/6	0	0.0	42.3	4.5
Watson Lakes	21A08A	4500	3/6	96	36.5	97.2	61.3
April 1							
GREEN RIVER							
Grass Mtn. No. 3	21B28	2100	3/29	0	0.0	8.1	-
CEDAR RIVER							
Mt. Lindsay	21B16	2500	3/29	15	5.7	24.1	17.7
Mt. Washington New	21B52	3000	3/30	0	0.0	New Course	
Rex River	21B17	2400	3/29	14	4.8	28.5	19.8

Average based on 1953-67 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

WSFB-X4-L

APPENDIX 3
SNOW DATA TO JUNE 1, 1973

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	5/15	43	22.0	61.2	43.4
Baree Midway	15B16	4600	5/15	17	8.0	37.6	26.8
Baree Trail	15B15	3800	5/15	0	0.0	0.0	0.0
Heart Lake Trail	14C10	4800	5/15	0	0.0	26.2	- -
Hoodoo Basin	15C10	6000	5/15	61	29.1	83.4	- -
			5/29	33	15.8	63.4	- -
Hoodoo Creek	15C01	5900	5/15	59	28.0	79.2	42.5
			5/29	32	15.0	61.4	32.0
Lookout	15B02	5250	5/15	21	9.2	47.0	28.4
			5/30	0	0.0	25.3	- -
Nelson	19-Can	3750	5/14	0	0.0	2.4	0.8*
Schweitzer Bowl	16A06	4500	5/29	0	0.0	0.0	- -
Schweitzer Ridge	16A05	6100	5/29	38	19.2	34.8	- -
KETTLE RIVER							
Big White Mtn.	154-Can	5500	Not Measured			23.4	17.6*
			5/30	18	8.2	11.5	9.3*
Monashee Pass	48A-Can	4500	5/17	8	1.6	14.0	9.7
			5/31	0	0.0	5.1	2.1
Old Glory Mtn.	42-Can	7000	5/12	65	25.9	33.6	28.8*
			5/31	29	14.0	31.1	16.8*
SPOKANE RIVER							
Granite Peak	15B13A	6000	5/29	20	10.1	57.4	- -
Lockout	15B02	5250	5/15	21	9.2	47.0	- -
			5/30	0	0.0	25.3	- -
Lost Lake	15B14A	6000	5/29	28	13.1	83.0	- -
Medicine Ridge	15B04A	6150	5/29	21	10.6	61.0	- -
OKANOGAN RIVER							
Blackwall Peak	100-Can	6250	5/14	47	24.4	61.0	38.7*
			5/31	23	12.4	49.8	30.4*
Bouleau Lake	234-Can	4580	5/13	24	6.8	- -	- -
			5/27	0	0.0	4.4	- -

Average based on 1953-67 average
* Average for years of record

USDA-SCS-PORTLAND, OREGON 1973

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APPENDIX 4
SNOW DATA TO JUNE 1, 1973

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
OKANOGAN RIVER (Cont.)							
Brenda Mine	193-Can	4800	5/10	0	0.0	14.5	- -
Brookmere	27-Can	3200	5/15	0	0.0	8.2	3.5*
Enderby	130-Can	6250	5/11	103	41.3e	55.6	45.6*
			5/30	76	31.6	48.9	40.9*
Graystoke Lake	5-Can	5950	5/15	Not Measured		28.5	23.4*
			5/29	18	8.2	23.0	19.0*
Hamilton Hill	107-Can	4900	5/13	0	0.0	- -	7.1*
Isintok Lake	152-Can	5510	5/12	10	3.8	15.2	5.0*
Lost Horse Mountain	105-Can	6300	5/16	14	4.3	22.7	10.8*
			6/1	Not Measured		11.3	4.2*
McCulloch	4-Can	4200	5/13	0	0.0	1.3	0.6*
Missequla Mountain	106-Can	5100	5/14	0	0.0	- -	2.1
Mission Creek	5A-Can	6000	5/12	44	17.2	27.4	19.2*
			5/29	22	7.8	21.7	11.5*
Monashee Pass	48A-Can	4500	5/17	8	1.6	14.0	9.7*
			5/31	0	0.0	5.1	2.1
Mount Kobau	156-Can	5950	5/15	13	4.2	17.0	11.0*
			6/1	0	0.0	5.4	2.2
Silver Star Mountain	99-Can	6050	5/13	52	20.4	40.0	26.2*
			5/27	28	12.5	32.6	15.7*
Summerland Reservoir	3A-Can	4200	5/12	0	0.0	8.6	3.1*
Trout Creek	3-Can	4700	5/15	0	0.0	12.1	1.8*
White Rocks Mountain	70-Can	6000	5/11	39	15.9	32.5	- -
			5/30	6	2.7	22.1	- -
ENTIAT RIVER							
Blue Creek G. S. +	20B28a	5425	5/17	28	14.0	- -	- -
Entiat Meadows +	20A33a	4800	5/17	30	15.0	49.8	33.8
			6/1	Not Measured		42.0	- -
Entiat River Trail +	20A34a	3150	5/17	0	0.0	0.0	- -
			6/1	Not Measured		0.0	- -
Four Mile Ridge +	20B27a	7000	5/17	24	12.0	54.1	- -
			6/1	Not Measured		36.0	- -
Fox Camp +	20A36a	6510	5/17	64	32.0	82.7	- -
			6/1	Not Measured		73.2	- -
Pope Ridge	20B20	4300	5/15	Not Measured		3.3	- -

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

APPENDIX 5
SNOW DATA TO JUNE 1, 1973

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
ENTIAT RIVER (Cont.)							
Pugh Ridge +	20A32a	6400	5/17	34	17.0	53.5	- -
			6/1	Not Measured		45.0	- -
Shady Pass	20A37	5000	5/15	Not Measured		45.5	- -
			6/1	Not Measured		27.0	- -
Snow Brushy +	20A35a	3850	5/17	0	0.0	31.8	19.9
			6/1	Not Measured		18.0	- -
Tommy Creek +	20B21a	5300	5/17	0	0.0	13.8	9.2
			6/1	Not Measured		8.0	- -
WENATCHEE RIVER							
Leavenworth R. S.	20B17	1127	5/10	0	0.0	0.0	0.0
Stevens Pass	21B01	4070	5/14	57	25.1	80.1	46.6
			5/31	20	9.4	75.9	31.2
Stevens Pass Sand Shed	21B45	3700	5/14	9	4.3	42.5	- -
			5/31	0	0.0	32.8	- -
YAKIMA RIVER							
Stampede Pass SP	21B10	3860	5/16	-	10.4	45.0	34.8
			6/1	-	0.0	43.6	18.5
PUGET SOUND DRAINAGE							
GREEN RIVER							
Stampede Pass SP	21B10	3860	5/16	-	10.4	45.0	34.8
			6/1	-	0.0	43.6	18.5
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	5/14	57	25.1	80.1	46.6
			5/31	20	9.4	75.9	31.2
Stevens Pass S. Shed	21B45	3700	5/14	9	4.3	42.5	- -
			5/31	0	0.0	32.8	- -

\# Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

APPENDIX 6
SNOW DATA TO JUNE 1, 1973

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER							
Dock Butte	21A11A	3800	5/16	87	44.0	- -	82.9
			6/1	Not Measured		77.0	66.1
Easy Pass	21A07A	5200	5/16	126	63.0	- -	108.0
			6/1	Not Measured		92.4	- -
Jasper Pass	21A06A	5400	5/16	134	67.0	- -	112.7
			6/1	Not Measured		77.0	- -
Marten Lake	21A09A	3600	5/16	110	55.0	- -	76.3
			6/1	Not Measured		90.8	65.1
Mount Blum +	21A18a	5800	5/16	126	63.0	82.5	- -
Rocky Creek	21A12A	2100	5/16	0	0.0	- -	- -
			6/1	Not Measured		0.0	- -
Schreibers Meadow	21A10A	3400	5/16	78	39.0	- -	69.8
			6/1	Not Measured		71.5	- -
S. F. Thunder Creek	21A14A	2200	5/16	0	0.0	- -	- -
Watson Lakes	21A08A	4500	5/16	Not Measured		- -	81.7
			6/1	Not Measured		79.2	68.8

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS-PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
ROOM 360, U.S. COURT HOUSE
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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
FEB. 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

SCS PHOTO A-272-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

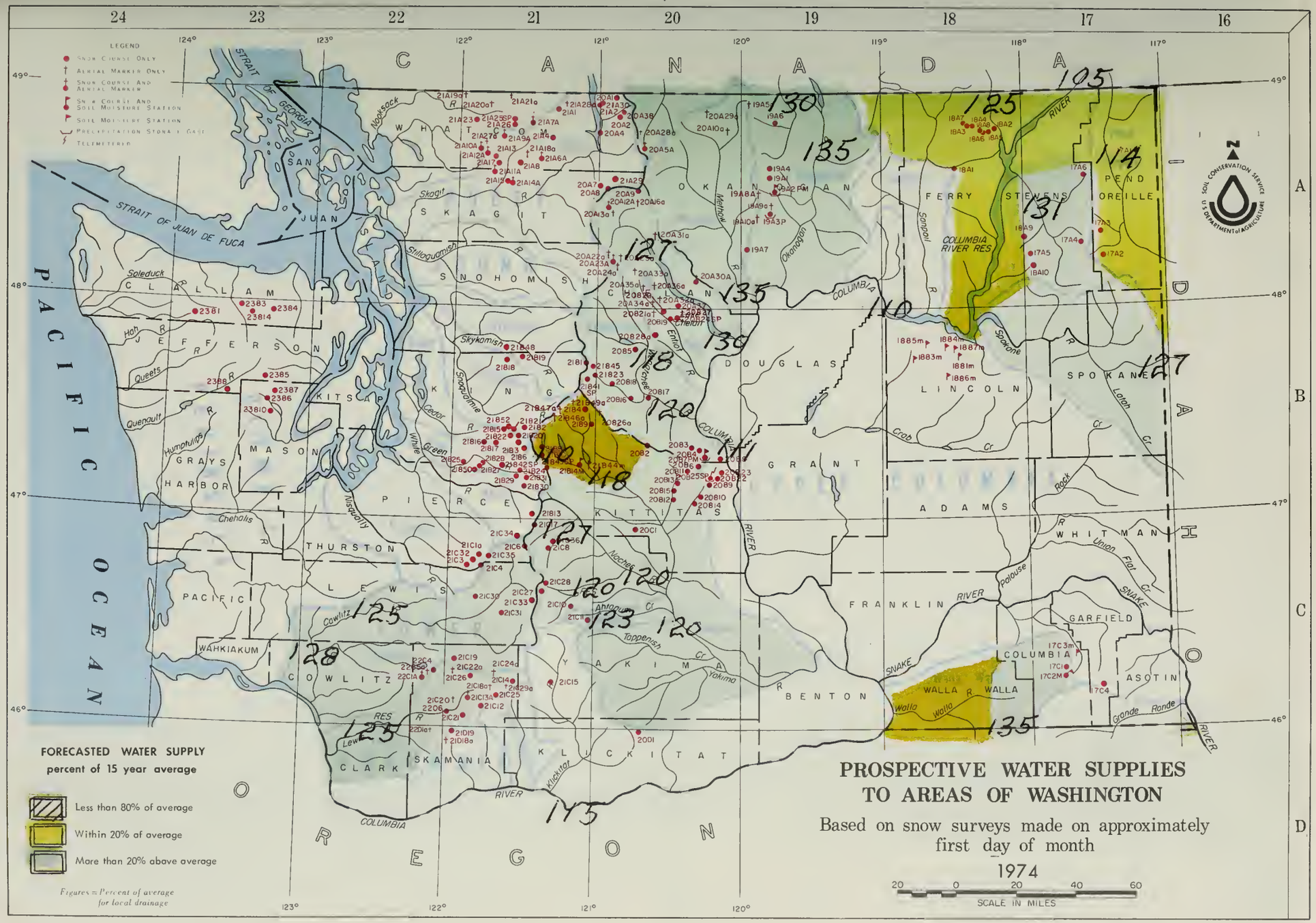
JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1974
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
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Green
Nisqually
Cowlitz
Lewis
Cheholis
Hoh
Queets
Quenault
Humptulips
Soleduck
Naches
Ahtanum Cr
Toppenish Cr
Yakima
Klickitat
Okanogan
Methow
Similkameen
Chelan
Entiat
Wenatchee
Sanpoil
Spokane
Crab Cr
Rock
Palouse
Union Flat Cr
Snake
Walla Walla
Grande Ronde
Latah Cr
COLUMBIA RIVER
SOIL CONSERVATION SERVICE
U.S. DEPARTMENT of AGRICULTURE

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Eunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

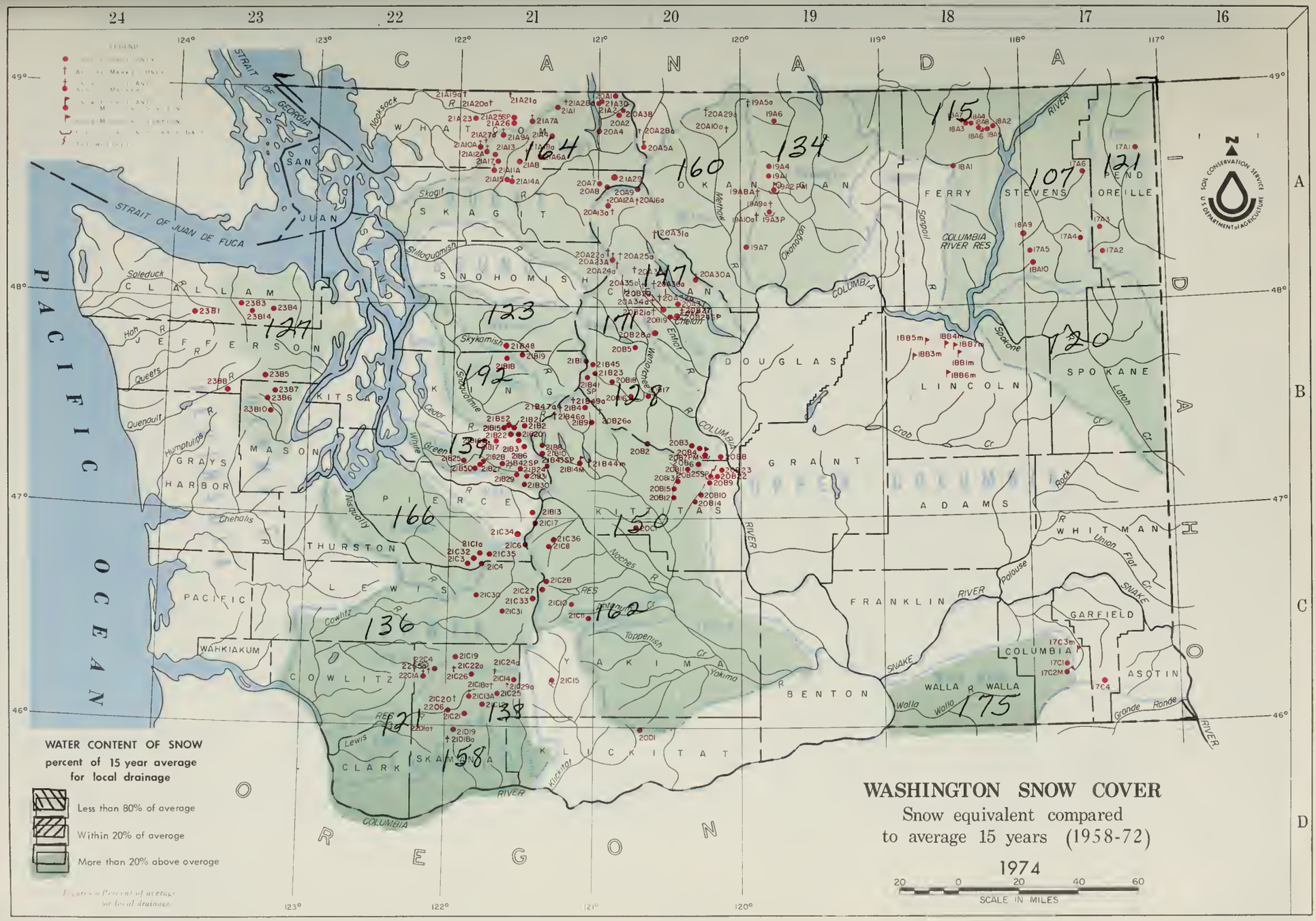
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	2384	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	2387	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1974
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
THURSTON
PACIFIC
LEWIS
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
CHELAN
OKANOGAN
DOUGLAS
GRANT
PIERCE
KING
BENTON
FRANKLIN
ADAMS
LINCOLN
SPOKANE
WHITMAN
GARFIELD
COLUMBIA
WALLA WALLA
ASOTIN
FERRY
STEVENS
PEND OREILLE
COLUMBIA RIVER RES
SOIL CONSERVATION SERVICE
U.S. DEPARTMENT of AGRICULTURE

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenotchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700
Wenotchee River (continued)					
Trough #2	20B2SSP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crob Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Solmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21C19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	2101Ba	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedor River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	2384	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	
Elwha River					
Hurricane	2383	36	29N	7W	4500
Skokomish River					
Black and White	2387	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
February 1, 1974

** * * *

RESERVOIRS

The five reservoirs in the Yakima drainage have 473,000 acre feet in storage as of February 1, compared to 630,000 for normal. This is 76 percent. Comparing this year to last, there is 62 percent and with 1972 - 66 percent. Some of the power reservoirs have more water in storage now than normal, but this is a result of extremely high inflows during the past month. The big reservoir, F. D. R. Lake, has a well below normal amount of water in storage as a result of evacuation of the reservoir for removal of the coffer dam at the third power house. All reservoirs will fill and probably spill with the spring runoff.

PRECIPITATION

Fall precipitation was varied over the Columbia Basin portion in Washington. It ranged from 9 percent below normal on the northwest slopes of the Cascades to 113 percent above normal in the north-central portion of the state. Winter precipitation was all well above normal, ranging from 39 percent above for the northwest slopes to 87 percent above for the Pend Oreille-Spokane drainage area. These percentage figures have been supplied by the National Weather Service.

SOIL MOISTURE

Only seven soil moisture stations are now being read in the state and tributary basins. The situation with these stations fluctuates from above normal to below with only the stack in the Wenatchee watershed showing near capacity soil moisture. Where the soil mantle is wetted to above normal, there has been generally heavy rains and excessive snowmelt. At the higher elevations this rain fell as snow or did not penetrate the snow packs, therefore did not get into the soil mantle.

STREAMFLOW

Only the Okanogan River was reported to have below normal runoff during the month of January. All other stations had well above normal flows, ranging from 31 percent above for the Chehalis to 379 percent above for the Palouse. Even the Columbia at International Boundary had a flow that was 128 percent above during the month. Forecasts of streamflow indicate the expected flow during the April-September period to range from 5 percent above normal for the Columbia River, as measured at Birchbank, to 35 percent above for the Okanogan River near Tonasket. Numerical forecasts can be found following this narrative statement.

STREAMFLOW FORECASTS - FEBRUARY 1974

The following summarized runoff forecasts are based principally on mountain snow-cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1973 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet: % 15-Yr. Avg.	Forecast period	1973	1972	1971	15-Yr Average 53-67
		COLUMBIA BASIN					
Columbia River System							
Columbia River	48700	105	Apr-Sep		56151	48708	46368
at Birchbank 1/	38850	104	Apr-Jul		46161	39464	37480
	28850	107	Apr-Jun		33937	29725	27040
Columbia River	76500	110	Apr-Sep		83837	77859	69458
at Grand Coulee 1/	65500	111	Apr-Jul		71776	66456	58899
	51200	112	Apr-Jun		56220	53058	45889
Columbia River	84500	111	Apr-Sep		97664	84668	76241
bl Rock Island Dam 1/	71000	110	Apr-Jul		84253	72806	64777
	56600	112	Apr-Jun		65862	58153	50387
Columbia River	120000	115	Apr-Sep		134716	126868	105176
at The Dalles, Or 1/	103000	114	Apr-Jul		117896	111064	90050
	85000	117	Apr-Jun		96374	91721	72410
PEND OREILLE RIVER SYSTEM							
Pend Oreille River							
bl. Box Canyon	18300	114	Apr-Sep		20294	19052	16030
	16700	113	Apr-Jul		18724	17763	14788
	14350	113	Apr-Jun		16109	15357	12754
KETTLE RIVER SYSTEM							
Kettle River	2400	125	Apr-Sep		2289	2240	1918
nr. Laurier	2290	126	Apr-Jul		2205	2177	1821
	2110	128	Apr-Jun		1965	1927	1644

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Forecast Period	1973	1972	1971	15-Yr Average 53-67
Kettle River System (Cont.)							
Colville River	200	131	Apr-Sep		114	170	153
at Kettle Falls	185	131	Apr-Jul		103	158	141
	170	130	Apr-Jun		94	146	131
Spokane River System*							
Spokane River							
at Post Falls Id 2/	3800	127	Apr-Sep		4002	3941	3140
	3700	121	Apr-Jul		3875	3798	3055
	3520	121	Apr-Jun		3644	3523	2913
Okanogan River System							
Similkameen River	1980	130	Apr-Sep		3259	1931	1525
nr. Nighthawk	1870	132	Apr-Jul		3090	1840	1419
	1600	134	Apr-Jun		2568	1576	1197
Okanogan River	2350	135	Apr-Sep		3852	2225	1738
nr. Tonasket	2150	136	Apr-Jul		3523	2077	1578
	1820	138	Apr-Jun		2895	1772	1318
Methow River System							
Methow River	1420	135	Apr-Sep		1959	1339	1054
nr. Pateros	1325	135	Apr-Jul		1819	1259	981
	1150	138	Apr-Jun		1524	1061	834
Chelan River System							
Chelan River	1650	130	Apr-Sep		1866	1550	1266
at Chelan 3/	1490	133	Apr-Jul		1619	1352	1119
	1190	137	Apr-Jun		1250	1019	870
Stehekin River	1150	127	Apr-Sep		1235	1093	904
at Stehekin	990	128	Apr-Jul		1044	927	772
	750	128	Apr-Jun		772	657	586

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

Basin, Stream and Station	Forecast Runoff 1974	% 15-Yr. Avg.	Forecast Period	1973	1972	1971	15-Yr. Average 53-67
			Seasonal Streamflow in Thousands of Acre-Feet				
Wenatchee River System							
Wenatchee River	1570	118	Apr-Sep		1926	1637	1333
at Plain	1450	120	Apr-Jul		1686	1448	1204
	1160	122	Apr-Jun		1272	1045	952
Wenatchee River	2180	120	Apr-Sep		2808	2241	1814
at Peshastin	2020	122	Apr-Jul		2481	1999	1651
	1630	124	Apr-Jun		1891	1454	1316
Stemilt Basin nr Wenatchee	138 *	105	Mar-Sep	*	145*	148*	131*
Yakima River System							
Yakima River	160	110	Apr-Sep		213	192	145
nr. Martin 4/	150	112	Apr-Jul		192	179	134
	130	112	Apr-Jun		160	139	116
Yakima River	1140	118	Apr-Sep		1515	1300	968
at Cle Elum 5/	1020	115	Apr-Jul		1374	1179	885
	900	118	Apr-Jun		1156	934	762
Yakima River	2080	120	Apr-Sep		3231	2873	1738
nr. Parker 6/	2070	120	Apr-Jul		3071	2620	1722
	1900	120	Apr-Jun		2694	2153	1583
Kachess River	145	113	Apr-Sep		196	172	128
nr. Easton 7/	138	113	Apr-Jul		182	163	122
	125	116	Apr-Jun		153	130	107
Cle Elum River	570	117	Apr-Sep		750	627	485
nr Roslyn 8/	530	119	Apr-Jul		673	568	445
	450	121	Apr-Jun		538	433	373

* Thousands of Miners' inches.

4/ Observed flow corrected for storage in Lake Keechelus.

5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

7/ Observed flow corrected for starage in Lake Kachess.

8/ Observed flow corrected for storage in Lake Cle Elum.

Basin, Stream and Station	Forecast Runoff 1974	% 15-Yr. Avg.	Forecast Period	Seasonal Streamflow in Thousands of Acre-Feet 1973	1972	1971	15-Yr. Average 53-67
Yakima River System (Cont.)							
Bumping River	190	127	Apr-Sep		234	193	150
nr. Nile 9/	175	127	Apr-Jul		209	174	138
	145	128	Apr-Jun		156	124	114
American River	165	127	Apr-Sep		186	172	129
nr. Nile	155	129	Apr-Jul		169	154	120
	130	131	Apr-Jun		137	113	99
Tieton River							
at Tieton Dam 10/	300	120	Apr-Sep		396	326	251
	260	120	Apr-Jul		338	272	215
	240	122	Apr-Jun		261	198	172
Naches River	1080	120	Apr-Sep		1477	1168	899
nr. Naches 11/	1010	123	Apr-Jul		1339	1055	819
	850	122	Apr-Jun		1106	833	698
Ahtanum Creek	60	123	Apr-Sep		75	63	49
nr. Tampico 12/	55	122	Apr-Jul		69	57	45
	50	125	Apr-Jun		59	48	40
Lower Columbia River System							
Mill Creek							
nr. Walla Walla	39	135	Apr-Sep		34	30	29
	33	132	Apr-Jul		29	26	25
	31	135	Apr-Jun		26	24	23
Lewis River	1700	125	Apr-Sep		1597	1827	1358
at Ariel 13/	1500	125	Apr-Jul		1392	1605	1197
	1360	128	Apr-Jun		1236	1341	1059
Cowlitz River	2700	125	Apr-Sep		3048	2800	2160
Blw. Mayfield Dam	2400	125	Apr-Jul		2672	2463	1908
	2000	124	Apr-Jun		2201	1935	1612
Cowlitz River	3600	128	Apr-Sep		3819	3710	2818
at Castle Rock 14/	3200	129	Apr-Jul		3331	3253	2487
	2700	127	Apr-Jun		2782	2585	2119

9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (combined)
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about February 1, 1974, as percent of the same date in 1973 and 1972 and average of record.

Tributary Basin	No. of Courses Average	1974 Snow Water Expressed as percent of 1973	1972	1958-72 Avg.
		UPPER COLUMBIA BASIN		
Pend Oreille	11	179	98	121
Kettle	16	198	95	115
Colville	5	187	110	107
Spokane	3	241	86	120
Okanogan	32	220	88	134
Methow	9	230	107	160
Chelan	8	190	104	147
Entiat	9	180	100	171
Wenatchee	9	241	76	128
Yakima	18	268	80	150
Ahtanum	2	196	95	162
		LOWER COLUMBIA		
Mill Creek	3	448	86	175
Klickitat	1	387	87	138
White Salmon	2	336	88	158
Lewis	18	309	70	121
Cowlitz	9	324	72	136
		PUGET SOUND		
Nisqually	4	337	82	166
Green	10	437	79	139
Snoqualmie	1	430	105	192
Skykomish	2	168	77	123
Skagit	10	220	98	164
Nooksack	2	203	72	-
		OLYMPIC PENINSULA		
Skokomish	4	201	94	127

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (February) 1974	1973	1972	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	386.0	153.3	147.3	137.0
Columbia	Franklin D. Roosevelt Lake	5232.0	730.6	4937.1	4420.2	3812.5
Columbia	Banks Lake	761.8	720.3	610.7	714.9	494.0
Okanogan	Conconully Reservoir	13.0	5.6	10.8	9.1	5.6
Okanogan	Salmon Lake	10.5	7.3	9.5	8.6	8.6
Chelan	Lake Chelan	676.1	297.7	237.1	190.4	318.4
		YAKIMA				
Yakima	Keechelus Lake	157.8	87.3	98.6	137.2	92.1
Kaches	Kachess Lake	239.0	93.6	193.0	156.5	172.2
Cle Elum	Lake Cle Elum	436.9	168.7	315.9	277.1	241.1
Bumping	Bumping Lake	33.7	10.8	6.7	5.0	9.9
Tieton	Rimrock Lake	198.0	112.0	143.1	146.7	111.3
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	1231.4	997.3	822.1	956.3
Skagit	Diablo Reservoir	90.6	85.2	83.4	83.9	85.6
Skagit	Gorge Reservoir	9.8	7.6	8.2	7.8	--

1/ Based on Active Storage

* 15-year average 1953-67

SOIL MOISTURE - FEBRUARY

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Feb. 1 1974	1973	1972
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	3.7	2.4	3.6
Trout Creek	3-M	3600	48	7.3	3.0	3.4	4.0
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	5.0	6.6	- -
Lake Cle Elum	21B14M	2200	48	12.8	9.2	6.9	- -
WALLA WALLA							
Couse	17C3m	3650	48	11.1	10.1	7.3	10.5
Helmers	17C2M	4400	48	12.0	9.8	10.7	10.6
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	11.3	8.9	9.0

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1973	1972	1971
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	2.6	2.8	2.7
Trout Creek	3-M	3600	48	7.3	2.8	3.3	3.3
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	2.6	4.1	2.1
Lake Cle Elum	21B14M	2200	48	12.8	6.1	8.7	7.1
WALLA WALLA							
Couse	17C3m	3650	48	11.1	5.6	6.0	6.2
Helmers	17C2M	4400	48	12.0	7.6	7.7	8.2
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	6.0	5.7	6.5

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct 1973 2/ Average	Departure	WINTER Nov-Dec 1973 Average	Jan 1974 2/ Departure
Columbia in Canada	5.14	+0.67	11.78	+2.57
Pend Oreille - Spokane	4.28	-0.20	24.21	+11.28
Northeastern Washington	3.36	-0.58	13.84	+5.95
Southeastern Washington	3.71	+0.48	15.84	+6.87
Central Washington	4.68	-0.07	28.87	+8.84
North Central Washington	3.44	+1.82	7.03	+2.11
Northwest Slope Cascades	11.53	-1.16	49.87	+14.05
Southwest Slope Cascades	9.69	+1.01	42.03	+13.12

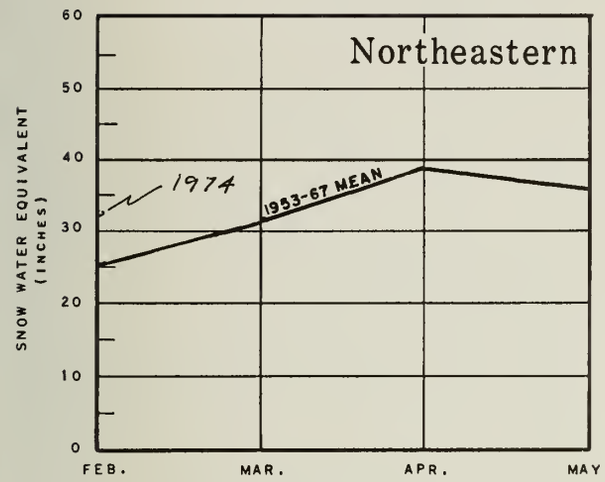
Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle Drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse Drainages.
Central Washington	- Yakima, Wenatchee and Chelan Drainages.
North Central Washington	- Methow and Okanogan Drainages.
Northwest Slope Cascades	- Puget Sound Drainages.
Southwest Slope Cascades	- Lower Columbia Drainages.

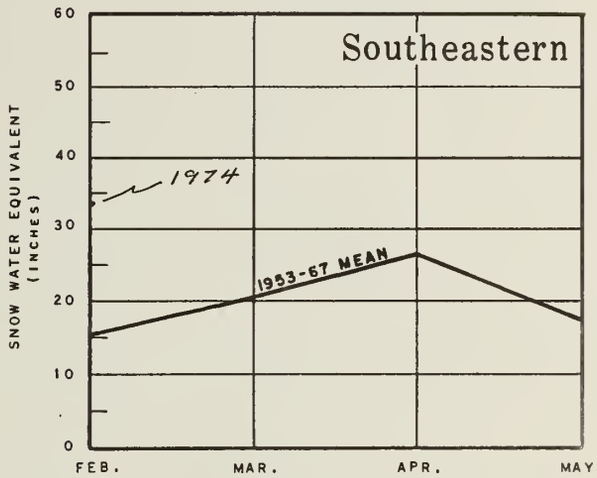
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

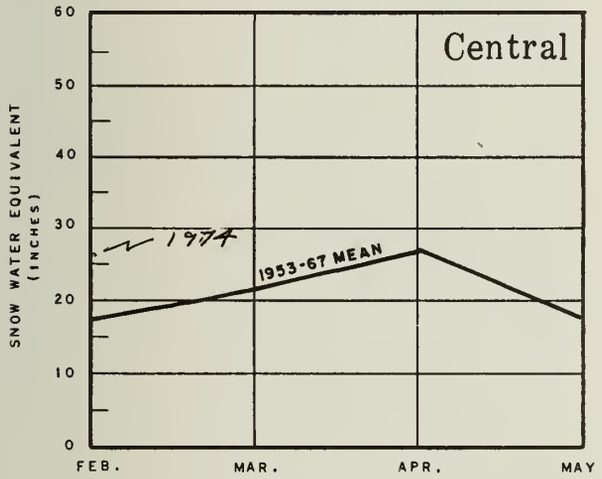
2/ - Departure from 15-year (1958-72) drainage division average.

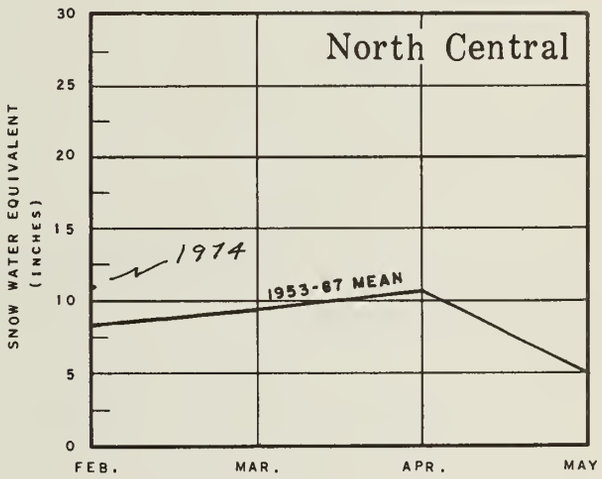
WASHINGTON SNOW COVER

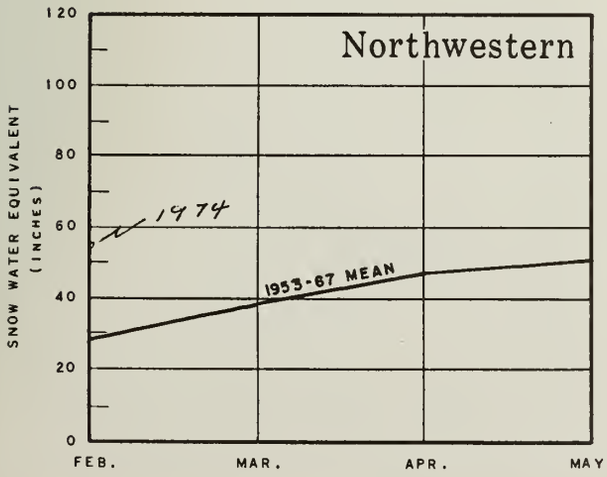
DRAINAGE AREAS

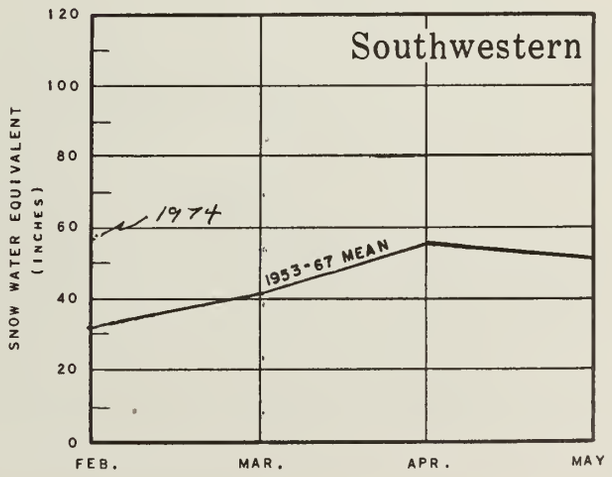










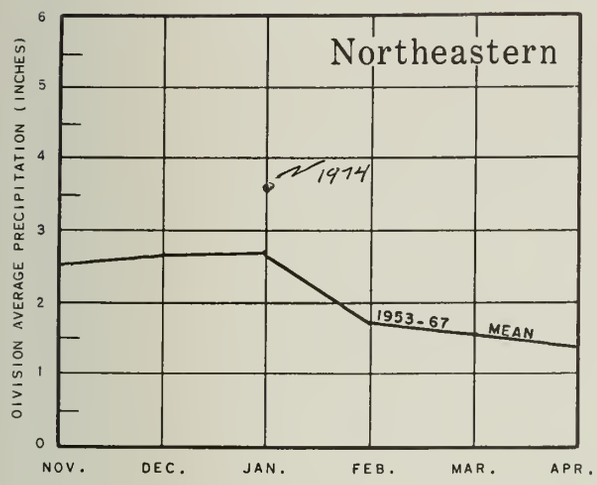


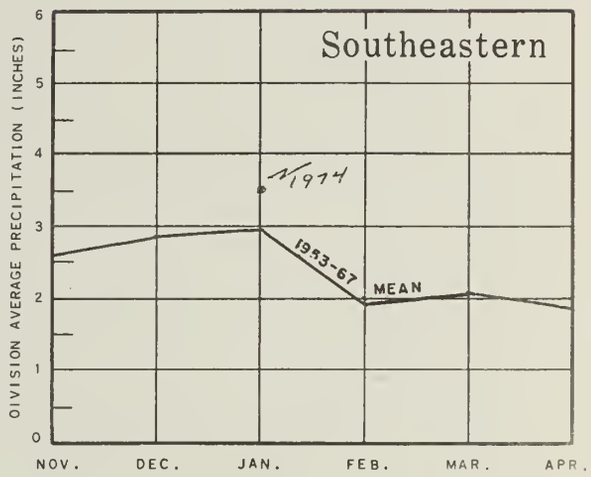
Selected Snow Survey Courses by Soil Conservation Service

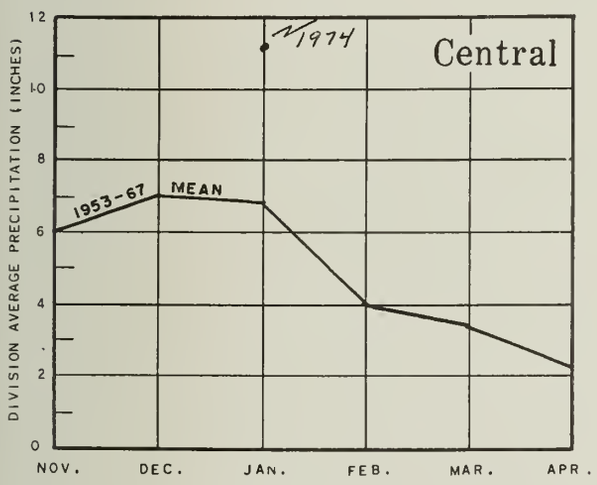
WASHINGTON VALLEY PRECIPITATION

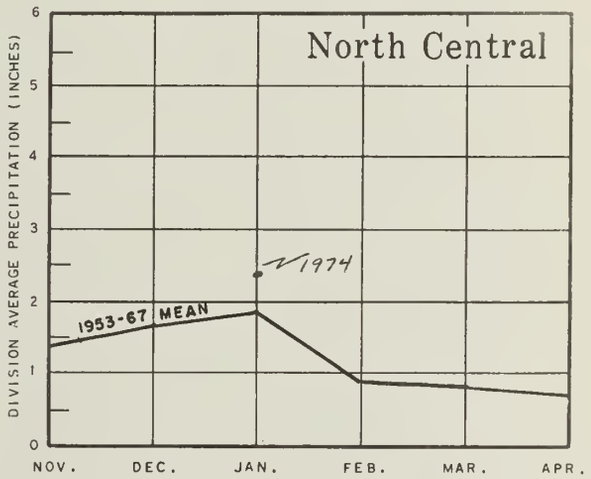
1974

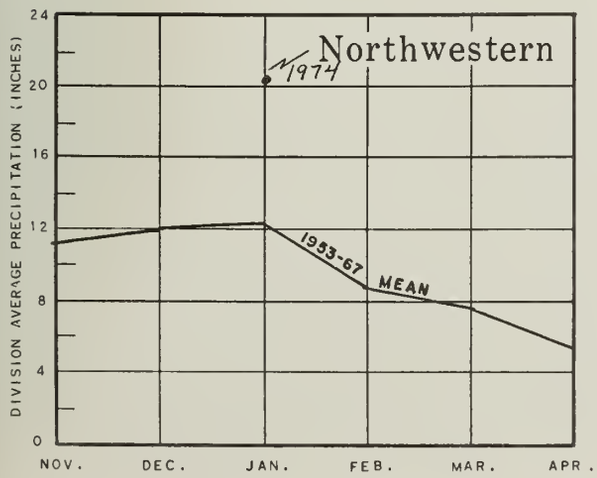
DRAINAGE AREAS

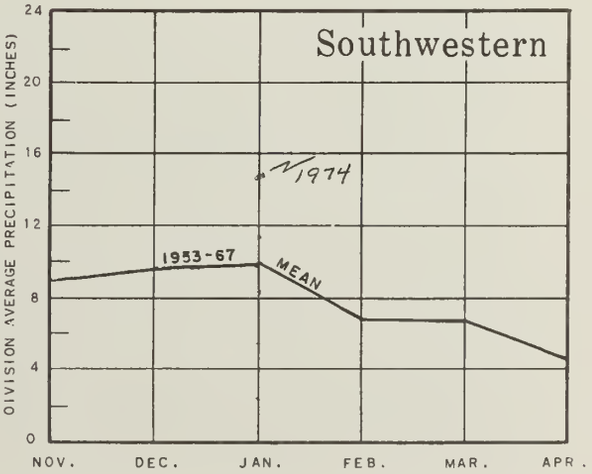












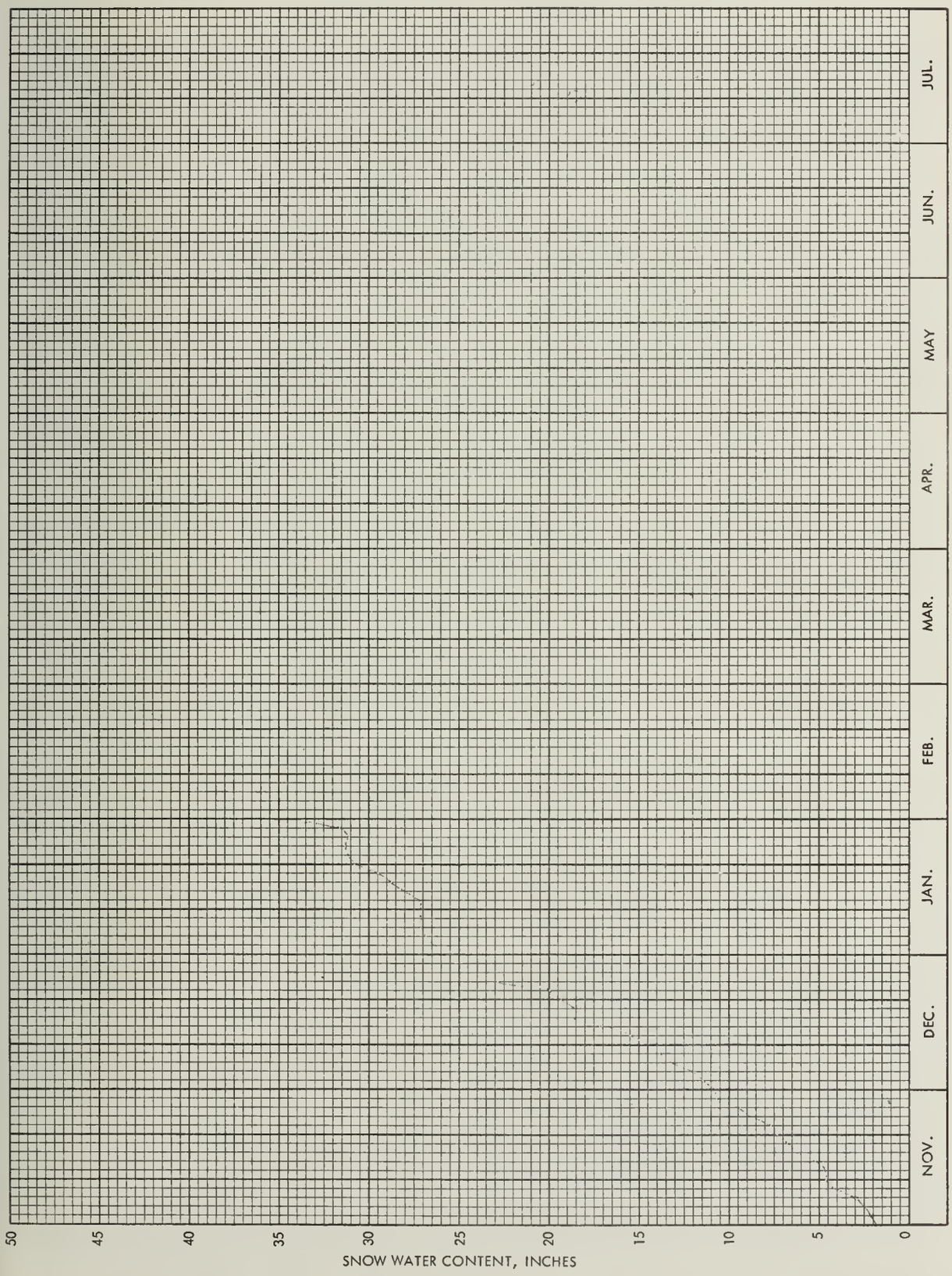
Preliminary Analysis by National Weather Service

SNOW PILLOW DATA

AS OF February 1, 1974

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42' Elev. 3240



M7-0-22028-C1-L

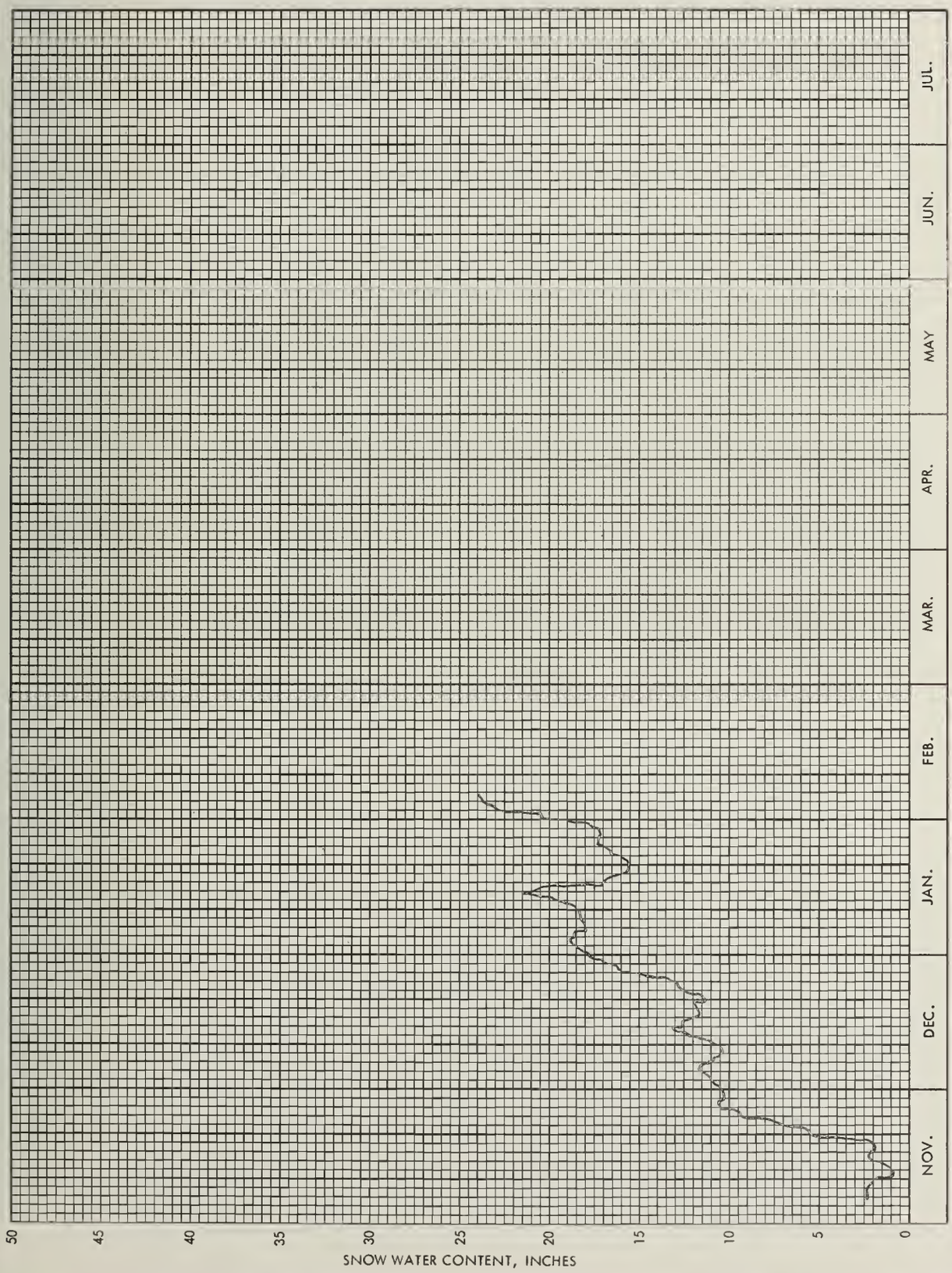
SNOW PILLOW DATA

Cougar Mountain - FS

1973 - 1974

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 120° 40' Elev. 3200'



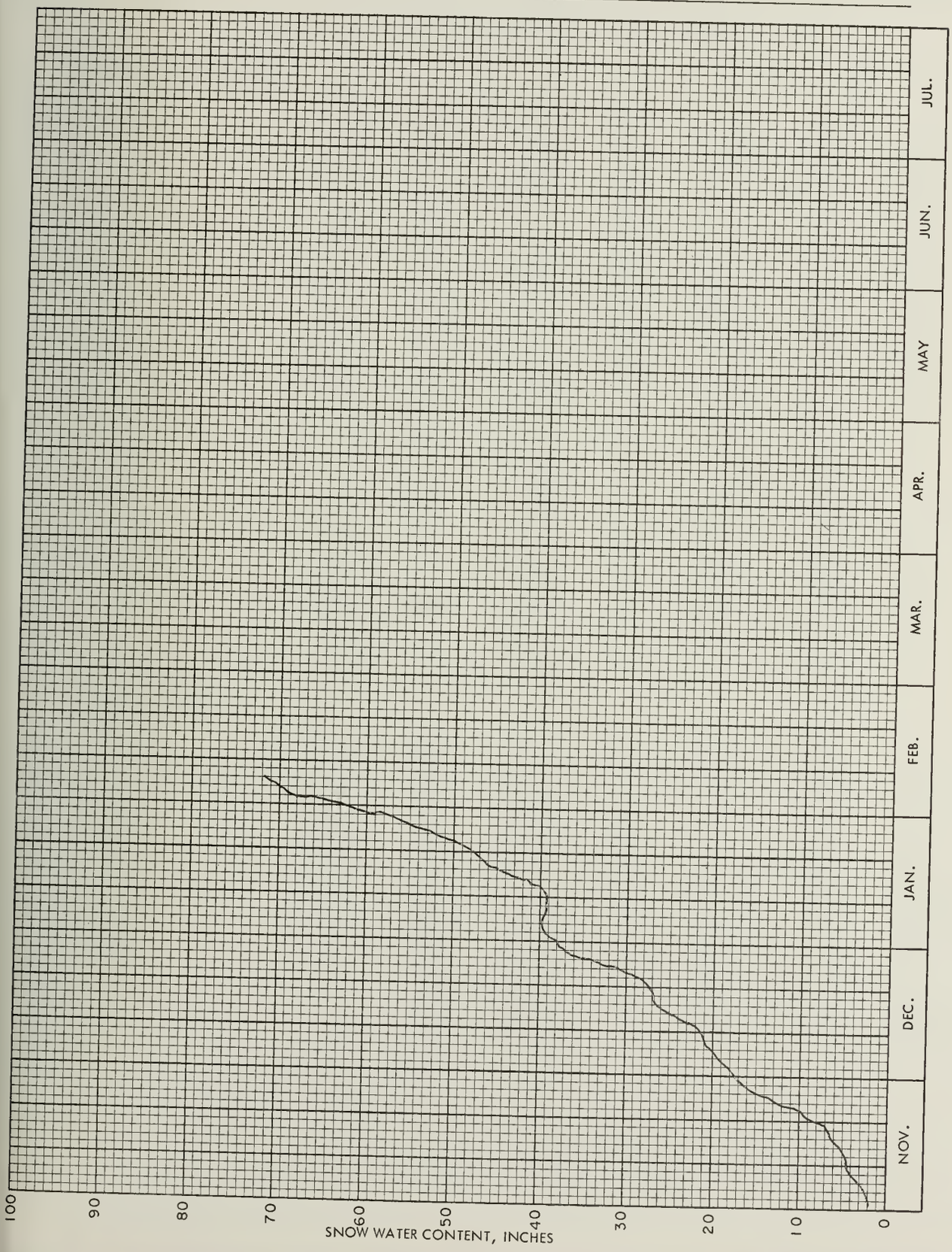
SNOWSHOE BUTTE - FS

SNOW PILLOW DATA

AS OF FEBRUARY 1, 1974

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Lang. 121° 22' Elev. 5000'



WSFB-X4-L

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Benton Meadow	16A02	4900	1/2	15	3.0	0.0	3.5
			1/30	6	1.8	1.8	6.0
Benton Spring	16A03	4900	12/31	46	14.3	5.8	8.4
			1/29	62	20.1	11.5	13.8
Chewelah	17A04	4925	2/2	59	17.2	9.0	13.0
Heart Lake Trail	14C10	4800	1/3	46	11.7	3.8	8.7
			1/29	65	19.1	7.2	17.6
Hoodoo Basin	15C10	6000	1/3	95	30.0	18.1	20.8
			1/29	128	46.0	28.8	37.9
Hoodoo Creek	15C01	5900	1/3	87	24.9	17.1	18.9
			1/29	125	41.9	26.4	35.5
Lookout	15B02	5250	12/28	79	18.1	10.5	15.6
			1/31	115	32.0	16.7	26.7
Nelson	19-Can	3050	11/1	0	0.0	0.9	-
			11/14	5	1.2	0.8	-
			12/13	48	9.9	1.8	-
			12.28	51	13.4	4.6	7.4*
			1/30	61	15.7	9.6	11.3*
Schweitzer Bowl	16A06	4500	12/28	84	24.8	9.7	-
			1/29	94	32.5	17.2	22.6
Schweitzer Ridge	16A05	6100	12/28	107	34.8	15.3	-
			1/29	140	53.5	26.3	32.1
Winchester Creek	17A03	2970	1/28	32	10.4	6.0	9.7
KETTLE RIVER							
Barnes Creek	90-Can	5300	1/30	60	15.1	10.8	14.1*
Big White Mountain	154-Can	5500	1/28	68	19.0	11.2	13.8*
Boulder Road	18A02	1450	1/30	7	2.0	1.1	4.6
Butte Creek	18A03	4070	1/30	32	8.7	5.4	7.4
Cabin Creek	18A08	3170	1/30	30	7.6	3.7	6.5
Carmi	126-Can	4100	1/28	25	6.2	2.2	5.3*
Farron # 1	17-Can	4000	1/31	50	13.9	8.0	9.6*
Farron # 2	243-Can	4000	1/31	50	12.9	7.8	New Course
Goat Creek	18A04	3595	1/30	26	6.7	4.0	6.2
Monashee Pass	48A-Can	4500	12/28	24	6.6	6.0	-
			1/30	43	9.3	8.3	9.6*
Old Glory Mountain	42-Can	7000	1/27	97	41.7	19.5	19.0*

Average based on 1958-72 average
* Average for years of record

USDA-SCS-PORTLAND, OREGON 1973

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average †
KETTLE RIVER (Cont.)							
Snow Caps Creek	18A05	2150	1/30	16	4.2	1.5	4.8
Snow Caps Trail	18A06	2720	1/30	22	4.6	2.1	5.5
Summit G. S.	18A07	4600	1/30	25	7.6	4.7	5.9
Trapping Creek Lower	166-Can	3050	1/28	20	4.7	1.2	4.4*
Trapping Creek Upper	165-Can	4450	1/28	38	8.5	5.8	7.4*
COLVILLE RIVER							
Baird	17A6	3215	1/31	25	7.4	4.4	6.1
Carlson	18A9	2885	2/1	3	0.7	1.0	4.5
Chewelah	17A4	4925	2/2	59	17.2	9.0	13.0
Stranger Mountain	17A5	4990	2/2	48	16.5	7.1	11.0
Togo	18A10	3370	2/2	40	11.9	4.3	10.1
SPOKANE RIVER							
Above Burke	15B8	4100	12/28	48	9.8	5.1	-
			1/31	74	17.7	9.0	-
4th of July Summit	16B3	3100	1/29	23	7.3	0.6	6.8
Lookout	15B02	5250	12/28	79	18.1	10.5	15.6
			1/31	115	32.0	16.7	26.7
Mosquito Ridge	16A4	5110	1/30	114	38.6	-	-
Sherwin	16C1	3200	12/31	39	10.0	1.3	-
			1/31	55	14.8	4.4	11.0
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	2/1	23	5.0	3.3	5.0*
Blackwall Peak	100-Can	6250	12/19	53	16.2	15.4	14.7*
			1/28	106	34.2	19.7	25.3*
Brenda Mine	193-Can	4800	1/28	40	11.7	7.7	9.9*
Brookmere	27-Can	3200	1/28	30	7.6	3.0	7.2*
Carrs Landing Upper	168-Can	3200	12/31	14	2.6	0.3	-
			1/31	14	2.6	1.1	3.8*
Clark +	19A8a	7000	2/5	72	21.6	- -	-
Enderby	130-Can	6250	1/28	104	32.2	23.6	25.0*
Freezeout Meadows New	20A38	5000	2/7	179	63.3	17.4	New
Hamilton Hill	107-Can	4900	1/29	52	13.1	8.4	10.4*
Harts Pass	20A05A	6500	2/6	156	52.3	25.9	32.0
Horseshoe Basin +	19A05a	7000	2/4	57	17.1	8.1	9.7
Isontok Lake	152-Can	5510	12/29	24	6.0	3.0	4.0*
			1/26	38	8.7	4.0	6.2*

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Lost Horse Mountain	105-Can	6300	1/30	48	7.8	4.8	6.7*
Loup Loup	19A07	4650	1/31	46	12.4	5.2	7.6
McCulloch	4-Can	4200	12/30	22	4.6	2.2	3.2*
			1/27	30	6.4	3.0	4.8*
Missizula Mountain	106-Can	5100	1/30	41	11.2	-	6.5*
Mission Creek	5A-Can	6000	12/27	46	12.4	7.8	8.9*
			1/29	67	18.7	10.3	13.6*
Monashee Pass	48A-Can	4500	12/28	24	6.6	6.0	-
			1/30	43	9.3	8.3	9.6*
Mount Kobau	156-Can	5950	1/31	49	14.7	5.0	10.6*
Muckamuck +	19A09a	6390	2/5	62	18.6	-	-
Mutton Creek No. 1	19A01	5700	1/29	57	18.5	7.4	10.4
Mutton Creek No. 2	19A04	6000	1/29	56	17.5	7.4	10.9
Mutton Creek No. 2 SP	19A11SP	6000	1/29	-	13.4	5.2	-
New Copper Mountain	46A-Can	4300	1/30	28	7.2	2.0	5.5*
New Penticton Res. # 2	183-Can	5225	1/31	39	9.3	4.2	7.5*
Oyama Lake	203-Can	4400	1/29	23	7.6	4.3	5.5*
Paysayten +	20A28a	4300	2/4	68	20.4	9.0	13.0
Postill Lake	55-Can	4500	1/30	31	6.5	4.1	5.9*
Rusty Creek	19A03	4000	1/28	30	9.4	3.2	5.9
Salmon Meadows	19A02	4500	1/29	40	11.5	4.6	7.8
Silver Star Mountain	99-Can	6050	1/1	58	18.9	13.5	14.2*
			1/27	75	25.2	15.3	19.1*
Starvation Mountain +	19A10a	6750	2/4	70	21.0	-	-
Summerland Reservoir	3A-Can	4200	12/30	24	6.3	2.8	4.6*
			1/27	32	8.4	4.5	7.7*
Touts Coulee	19A06	2845	1/29	17	4.9	1.0	3.4
Trout Creek	3-Can	4700	1/28	30	7.0	3.5	5.2*
Vasseux Creek	233-Can	4600	1/6	22	4.6	1.8	-
			1/30	28	5.4	2.0	5.5*
White Rocks Mountain	70-Can	6000	1/29	82	27.3	12.2	18.5*
METHOW RIVER							
Billy Goat Pass +	21A10a	6409	2/4	95	28.5	-	20.8
Dollar Watch +	20A29a	7000	2/4	99	29.7	14.6	19.4
Harts Pass	20A05A	6500	2/6	156	52.3	25.9	32.0
Horseshoe Basin +	19A05A	7000	2/4	57	17.1	8.1	9.7
Loup Loup	19A07	4650	1/31	46	12.4	5.2	7.6

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
METHOW RIVER(Cont.)							
Mutton Creek No. 1	19A01	5700	1/29	57	18.5	7.4	10.4
Mutton Creek No. 2	19A04	6000	1/29	56	17.5	7.4	10.9
Rusty Creek	19A03	4000	1/28	30	9.4	3.2	5.9
Salmon Meadows	19A02	4500	1/29	40	11.5	4.6	7.8
War Creek Pass +	20A31a	6500	2/5	147	44.1	23.5	-
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	2/5	160	51.2	22.2	29.0
Greenwood Flat +	20A25a	3540	2/5	90	28.8	15.3	23.3
Little Meadows +	20A24a	5275	2/5	133	42.6	22.2	32.2
Lyman Lake +	20A23A	5900	Marker Down			39.0	42.1
Park Creek Flat +	20A13a	2220	2/5	100	32.0	19.5	27.3
Park Creek Ridge	20A12A	4600	2/5	175	56.0	28.5	34.1
Petersons +	20A16a	3730	2/5	123	39.4	21.6	25.1
Rainy Pass	20A09	4780	2/6	142	45.6	26.0	29.5
Safety Harbor +	20A30A	6300	Marker Buried			15.4	-
War Creek Pass +	20A31a	6500	2/5	147	44.1	23.5	-
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	2/5	132	37.0	24.5	-
Entiat Meadows +	20A33a	4800	2/5	174	48.7	26.4	-
Entiat River Trail +	20A34a	3150	2/5	82	22.3	9.9	-
Four Mile Ridge +	20B27a	7000	2/5	144	40.3	20.1	-
Fox Camp +	20A36a	6510	2/5	182	51.0	32.6	-
Pope Ridge	20B20	4300	2/1	86	24.0	11.5	14.0
Pugh Ridge	20A32a	6400	2/5	127	35.6	22.9	-
Shady Pass	20A37	6200	Not Measured			18.5	-
Snow Brushy +	20A35a	3850	2/5	133	37.2	22.9	-
Tommy Creek +	20B21a	5300	2/5	94	26.3	14.4	-
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	11/14	14	1.4	-	1.1
			11/29	41	10.2	1.4	4.1
			12/13	55	12.9	2.3	7.6
			12/27	75	19.8	6.9	11.2
			1/29	82	29.3	13.9	21.4

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER (Cont.)							
Berne-Mill Creek New	21B41SP	3240	11/29	41	10.0	1.0	-
			12/27	77	23.6	4.7	9.9
			1/29	75	28.2	10.9	18.7
Blewett Pass No. 2	20B02	4270	12/27	51	13.4	4.7	6.7
			2/4	64	19.0	5.4	13.0
Chiwaukum G. S.	20B16	1810	11/14	6	1.4	-	0.2
			11/29	18	4.6	-	1.5
			12/13	29	6.1	0.5	3.2
			12/27	47	10.0	2.0	5.1
			1/29	42	12.8	4.1	9.9
Lake Wenatchee	20B05	1970	11/14	5	1.1	-	0.3
			11/29	23	4.7	1.2	1.5
			12/13	30	6.3	0.6	3.9
			12/27	47	10.9	2.6	6.1
			1/16	47	13.9	4.9	9.6
			1/29	42	14.8	5.4	12.1
Leavenworth R. S.	20B17	1127	11/1	1	0.5	-	0.0
			11/5	2	1.0	-	0.0
			12/3	5	2.2	-	0.8
			12/17	8	3.0	0.5	1.8
			1/2	20	4.8	-	3.4
			1/15	19	6.8	1.9	4.7
			2/4	13	5.4	3.3	6.0
Lyman Lake +	20A23A	5900	Marker Down			39.0	42.1
Merritt	20B18	2140	11/14	8	2.0	-	-
			11/29	30	6.6	0.6	2.3
			12/13	34	8.4	0.5	4.9
			12/27	56	13.4	2.8	7.9
			1/16	60	16.2	5.2	11.7
			1/29	49	17.9	6.7	14.5
Stevens Pass	21B01	4070	11/14	24	3.6	2.9	3.6
			11/29	59	14.6	6.0	8.9
			12/13	86	25.4	8.4	14.7
			12/27	108	32.6	15.4	21.7
			1/16	100	37.9	21.8	29.0
			1/29	141	45.8	26.0	37.0
Stevens Pass Sand Shed	21B45	3700	11/14	18	2.0	-	-
			11/29	48	11.0	2.5	-
			12/13	65	16.0	3.5	-
			12/27	84	23.9	9.1	-
			1/16	79	27.9	14.6	-
			1/29	107	33.2	18.4	-

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

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SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 6

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	Not Measured			8.3	-
Colockum Creek Lower	20B23	4300	2/1	45	13.0	6.0	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	1/30	35	11.4	5.3	6.6
Scout-A-Vista	20B04	3400	1/30	39	12.2	5.8	6.5
STEMILT CREEK							
Jump-Off	20B08	4450	2/1	41	11.8	6.0	6.7
Stemilt Slide	20B06	5000	1/31	66	18.6	10.0	12.4
Upper Wheeler	20B07	4400	1/31	43	15.6	6.0	8.3
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	12/28	37	5.8	1.5	3.1
			1/29	22	10.2	4.0	6.3
Blewett Pass No. 2	20B02	4270	12/27	51	13.4	4.7	6.7
			2/4	64	19.0	5.4	13.0
Bumping Lake Old	21C08	3450	11/30	29	7.5	-	2.3
			12/13	37	9.1	-	4.0
			1/2	56	14.4	3.6	7.1
			1/20	57	16.8	6.6	10.4
			2/4	71	20.2	8.0	13.2
Bumping Lake New	21C36	3400	11/30	34	9.0	-	-
			12/13	44	10.8	-	5.8
			1/2	63	16.9	4.1	8.7
			1/20	64	18.8	9.1	13.0
			2/4	82	24.0	7.0	18.3
Cayuse Pass	21C06	5300	2/7	218	86.4	38.9	58.7
Colockum Pass	20B09	5370	1/28	56	17.6	10.6	11.2
Cooke Creek	20B10	4123	1/28	27	8.2	3.4	7.2
Grouse Camp	20B11	5385	1/29	56	19.9	10.0	12.1
High Creek	20B12	2930	1/29	26	7.0	3.0	4.9
Joe Lake +	21B46a	4624	Not Measured			18.0	-
Green Lake	21C10	6000	1/29	93	25.2	18.2	-
Lake Cle Elum	21B14M	2200	10/31	7	0.9	0.0	-
			11/19	6	1.6	0.0	-
			11/30	15	3.6	-	1.1
			12/14	15	4.4	1.0	2.2
			1/3	38	9.0	0.0	4.2
			1/16	37	10.7	1.6	6.5
			2/4	29	10.4	3.6	8.2

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

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SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
Lemah Creek +	21B47a	3327	2/7	132	39.6	14.2	-
Manashtash	20C01	3935	1/25	19	6.2	2.4	3.9
Morse Lake	21C17	5400	Not Measured			34.2	41.7
Nanum	20B13	3875	1/29	32	10.1	4.5	7.8
Olallie Meadows	21B2	3625	2/6	170	62.9	14.6	32.7
Satus Pass	20D01	4030	1/30	35	12.0	3.1	8.7
Stampede Pass SP	21B10	3860	12/9	-	17.8	-	6.3
			12/18	-	23.4	-	11.9
			1/1	-	35.6	11.5	16.5
			1/15	-	39.4	14.8	22.0
			2/5	-	60.6	18.5	38.7
Trail Creek	20B14	3360	1/28	8	3.7	0.0	2.3
Tunnel Avenue	21B08	2450	10/31	7	1.0	0.0	-
			11/16	15	3.9	0.0	0.0
			11/30	34	8.5	-	2.7
			12/13	37	10.5	1.0	6.4
			1/3	62	18.8	4.5	9.2
			1/16	57	19.8	6.4	11.3
			2/4	76	26.3	9.6	17.6
Van Epps Pass +	20B26a	5925	2/7	123	36.9	19.2	-
Walters Flat	20B15	3360	1/29	30	9.6	3.9	6.3
Waptus Lake +	21B49a	3024	2/7	170	51.0	15.8	-
White Pass (E. Side)	21C28	4500	11/28	36	8.6	-	-
			12/14	44	11.5	-	6.3
			1/3	70	19.6	5.7	9.6
			1/18	64	21.3	8.1	14.0
			2/5	88	27.7	9.1	18.2
White Pass (L. Lake)	21C27	4500	12/28	80	23.1	5.7	11.8
			2/2	96	32.6	9.4	22.0
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	12/28	37	5.8	1.5	3.1
			1/29	22	10.2	4.0	6.3
Green Lake	21C10	6000	1/29	93	25.2	18.2	-
ASOTIN CREEK							
Spruce Springs	17C4	5700	1/28	72	26.7	9.4	19.3

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

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SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 8

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
MILL CREEK							
Homestead	17C1	4030	1/30	31	10.9	1.2	6.5
Martin Springs	17C02	4400	1/30	47	15.6	1.8	9.8
Tollgate	18D3M	5070	1/29	95	33.6	7.5	16.7
KLICKITAT RIVER							
Satus Pass	20D1	4030	1/30	35	12.0	3.1	8.7
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	1/1	113	35.1	10.3	17.8
			2/5	145	49.4	16.4	32.5
Surprise Lakes	21C13A	4250	12/31	113	37.2	10.8	20.1
			2/5	166	58.7	15.8	35.9
WIND RIVER							
Old Man Pass	21D19	3100	12/31	56	15.8	0.8	7.5
			2/5	58	19.3	5.0	14.7
LEWIS RIVER							
Blue Lake +	21C22a	4800	12/31	167	55.1	25.5	34.5
			2/1	216	77.8	34.6	60.5
Bob's Trail	21C21	2200	1/1	44	12.4	1.0	6.5
			2/3	42	15.9	3.3	12.0
Calamity Ridge +	22D01a	2500	12/31	11	3.2	1.2	3.9
			2/5	4	0.3	0.2	5.6
Council Pass +	21C18a	4200	12/31	102	32.6	10.1	18.6
			2/1	134	46.9	17.9	29.7
Cultus Creek	21C12	4000	1/1	113	35.1	10.3	17.8
			2/5	145	49.4	16.4	32.5
Divide Meadow	21C29a	5600	12/31	108	34.6	16.8	27.5
			2/3	154	53.9	16.6	42.3
Grand Meadow	21C25	3500	12/31	74	20.2	4.1	10.5
			2/3	86	30.0	8.4	19.4
Lone Pine Shelter	21C26	3800	1/1	104	32.6	7.0	17.0
			2/5	133	45.1	12.7	30.5
Marble Mountain +	22C05a	3200	12/31	78	25.5	4.0	12.7
			2/1	84	37.0	7.1	28.7
Mosquito Meadows	21C19	4100	1/1	94	28.6	8.6	18.9
			2/5	126	41.3	15.4	32.1

Average based on 1958-72 average

\+ Snow water equivalent estimated from aerial stadia observation

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SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
LEWIS RIVER (Cont.)							
New Muddy River	22C06	2000	1/1	30	7.4	0.0	6.4
			2/1	7	3.4	1.7	12.1
Old Man Pass	21D19	3100	12/31	56	15.8	0.8	18.9
			2/5	58	19.3	5.0	32.1
Plains of Abraham +	22C01a	4400	12/31	152	50.2	19.5	28.8
			2/3	162	61.6	28.8	45.2
Smith Creek Road	22C04	2100	1/1	45	14.4	0.0	9.5
			2/1	38	15.4	6.0	15.7
Spencer Meadow +	21C20a	3400	12/31	66	19.8	3.2	10.2
			2/3	84	30.2	8.4	17.9
Surprise Lakes	21C13A	4250	12/31	113	37.2	10.8	20.1
			2/5	166	58.7	15.8	35.9
Table Mountain +	21C24a	4200	12/31	120	38.4	11.8	21.4
			2/3	154	53.9	20.5	34.8
Timbered Peak +	21D18a	3000	12/31	48	13.9	1.2	8.0
			2/5	50	16.5	6.0	14.3
COWLITZ RIVER							
Cayuse Pass	21C06	5300	12/31	158	52.8	23.8	41.3
			2/7	218	86.4	38.9	58.7
Mosquito Meadows	21C19	4100	1/1	94	28.6	8.6	18.9
			2/5	126	41.3	15.4	32.1
Ohanapecosh	21C32	2200	12/28	39	10.0	0.1	4.9
			2/2	40	13.9	3.3	14.4
Packwood Lake	21C31	2870	12/31	36	8.4	0.7	4.7
			2/2	48	14.9	2.9	10.6
Pigtail Peak	21C33	5900	12/28	115	33.7	22.5	26.1
			1/16	106	42.9	26.1	-
			2/2	176	60.5	30.0	46.7
Plains of Abraham +	22C01a	4400	12/31	152	50.2	19.5	28.8
			2/3	162	61.6	28.8	45.2
Potato Hill	21C14	4500	1/1	75	22.2	8.0	12.8
			2/5	106	32.6	11.5	23.7
White Pass (E. Side)	21C28	4500	11/28	36	8.6	-	-
			12/14	44	11.5	-	6.3
			1/3	70	19.6	5.7	9.6
			1/18	64	21.3	8.1	14.0
			2/5	88	27.7	9.1	18.2
White Pass (L. Lake)	21C27	4500	12/28	80	23.1	5.7	11.8
			2/2	96	32.6	9.4	22.0
Willame Creek	21C30	3250	12/31	75	22.6	4.0	10.8
			2/2	106	34.4	9.4	22.3

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

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SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 10

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	1/2	91	29.7	12.8	13.6
			2/6	146	49.0	17.3	31.7
Longmire	21C03	2760	12/27	31	7.8	0.4	2.5
			2/6	46	17.2	2.8	8.3
New Paradise Park	21C35	5500	1/2	128	44.2	22.0	24.9
			2/6	200	76.0	34.6	50.2
Stem Glade	21C01	5050	1/2	122	40.7	20.4	24.9
			2/6	195	71.9	30.9	48.3
WHITE RIVER							
Cayuse Pass	21C06	5300	12/31	158	52.8	23.8	41.3
			2/7	218	86.4	38.9	58.7
GREEN RIVER							
Airstrip	21B24	1800	11/29	9	2.4	0.0	0.6
			12/31	12	2.5	0.0	2.5
			2/5	8	2.0	1.6	4.9
Charley Creek	21B25	1200	11/29	2	0.8	0.0	0.0
			12/31	3	0.6	0.0	1.6
			2/5	Trace	0.0	0.0	1.5
Cougar Mountain	21B42SP	3200	1/4	45	15.2	3.4	-
			2/6	70	24.6	6.2	-
Grass Mtn. No. 2	21B27	2900	11/29	30	9.2	0.2	2.9
			12/31	47	13.9	2.1	7.6
			2/5	69	26.2	6.0	15.3
Grass Mtn. No. 3	21B28	2100	11/29	10	3.1	0.0	0.7
			12/31	13	1.9	0.5	2.6
			2/5	11	2.8	1.5	5.3
Lester Creek	21B29	3100	11/29	34	9.1	0.3	3.4
			12/31	64	16.8	3.8	9.7
			2/5	87	28.8	7.8	17.8
Lynn Lake	21B50	4000	11/29	28	10.4	0.3	-
			12/31	45	16.2	3.2	-
			2/5	82	33.5	2.2	-
Sawmill Ridge	21B31	4700	11/29	46	10.8	1.9	7.0
			12/31	74	23.2	8.8	15.2
			2/5	136	43.8	13.7	28.6
Snowshoe Butte	21B43SP	5000	1/4	106	33.6	15.4	-
			2/6	175	72.0	27.2	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 11

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
GREEN RIVER (Cont.)							
Stampede Pass SP	21B10	3860	12/9	-	17.8	-	6.3
			12/18	-	23.4	-	11.9
			1/1	-	35.6	11.5	16.5
			1/15	-	39.4	14.8	22.0
			2/5	-	60.6	18.5	28.7
Twin Camp	21B30	4100	11/29	Not Measured		0.7	4.1
			12/31	64	17.8	4.7	11.3
			2/5	101	32.2	7.7	17.6
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	2/6	170	62.9	14.6	32.7
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	11/14	24	3.6	2.9	3.6
			11/29	59	14.6	6.0	8.9
			12/13	86	25.4	8.4	14.7
			12/27	108	32.6	15.4	21.7
			1/16	100	37.9	21.8	29.0
			1/29	141	45.8	26.0	37.0
Stevens Pass Sand Shed	21B45	4070	11/14	18	2.0	-	-
			11/29	48	11.0	2.5	-
			12/13	65	16.0	3.5	-
			12/27	84	23.9	9.1	-
			1/16	79	27.9	14.6	-
			1/29	107	33.2	18.4	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	2/7	49	16.4	6.6	-
Beaver Pass	21A01	3680	2/5	110	35.1	14.0	-
Brown Top Ridge +	21A28a	6000	2/5	210	74.4	38.6	-
Cloudy Pass +	20A22a	6500	2/5	160	51.2	22.2	29.0
Devils Park	20A04	5900	2/6	155	53.5	27.2	31.9
Freezeout Creek Trail	20A01	3500	2/7	62	15.6	8.0	-
Freezeout Meadows New	20A38	5000	2/7	179	63.3	17.4	-
Granite Creek	21A29A	3500	2/6	81	21.0	10.4	-
Harts Pass	20A05A	6500	2/6	156	52.3	25.9	32.0
Klesilkwa	35B-Can	3700	Not Measured			5.1	10.4*
Lake Hozomeen	21A02	2600	Not Measured			2.6	-
Lyman Lake	20A23A	5900	Marker Down			39.0	42.1

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 12

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
SKAGIT RIVER (Cont.)							
Meadow Cabins	20A08	1900	2/6	17	5.6	2.8	-
New Hozomeen Lake	21A30	2800	2/7	58	16.7	4.8	-
New Tashme	26A-Can	2500	2/2	47	13.4	4.0	8.5
Rainy Pass	20A09	4780	2/6	142	45.6	26.0	29.5
Thunder Basin	20A07	4200	2/6	83	24.1	11.2	-
BAKER RIVER							
Baker Pass +	21A27a	4900	12/31	130	52.0	-	-
			2/5	254	101.0	-	-
Dock Butte +	21A11A	3800	11/5	12	3.6	3.6	-
			12/4	62	18.6	8.4	-
			12/31	96	39.0	27.0	-
			2/5	212	85.0	41.0	44.8
Easy Pass +	21A7A	5200	11/5	18	5.4	0.6	-
			12/4	62	18.6	7.2	-
			12/31	92	37.0	26.0	-
			2/5	216	86.0	38.0	53.9
Jasper Pass +	21A6A	5400	11/5	12	3.6	2.4	-
			12/4	114	34.2	15.9	-
			12/31	144	58.0	46.0	-
			2/5	269	108.0	64.0	64.7
Marten Lake	21A09A	3600	11/5	6	1.8	3.6	-
			12/4	92	27.6	12.0	-
			12/31	120	48.0	33.0	-
			2/5	204	82.0	51.0	52.2
Mt. Blum +	21A18a	5800	11/5	6	1.8	1.2	-
			12/4	58	26.4	8.7	-
			12/31	120	48.0	38.0	-
			2/5	192	77.0	46.0	42.5
Panorama New	21A26	4300	1/14	120	41.7	30.7	-
			1/29	168	62.0	35.7	-
Rocky Creek	21A12A	2100	11/5	4	1.2	4.5	-
			12/4	34	10.2	0.6	-
			12/31	47	19.0	9.0	-
			2/5	88	35.0	21.0	21.5
Schreibers Meadow	21A10A	3400	11/5	5	1.5	0.9	-
			12/4	66	19.8	3.6	-
			12/31	92	37.0	18.0	-
			2/5	193	77.0	31.0	39.9
S.F. Thunder Creek +	21A14A	2200	11/5	2	0.6	0.6	-
			12/4	12	3.6	0.3	-
			12/31	16	6.0	3.0	-
			2/5	32	13.0	3.0	7.4

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

WSFB-X4-L

SNOW DATA TO FEBRUARY 1, 1974 - APPENDIX 13

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average #
BAKER RIVER (Cont.)							
Watson Lakes	21A08A	4500	11/5	12	3.6	3.0	-
			12/4	56	16.8	9.6	-
			12/31	100	40.0	24.0	-
NOOKSACK RIVER							
Glacier Creek	21A23	3700	12/3	33	9.0	0.0	-
			12/27	27	8.2	5.4	-
			1/28	61	18.4	7.9	-
Panorama New	21A26	4300	1/14	120	41.7	30.7	-
			1/29	168	62.0	35.7	-
MORSE CREEK							
Cox Valley	23B14	4500	2/2	122	40.8	23.8	-
ELWHA RIVER							
Hurricane	23B03	4500	Late Report			11.7	16.7
SKOKOMISH RIVER							
Black & White	23B07	4200	12/28	84	29.2	12.8	16.9
			2/4	128	41.8	22.9	30.5
Black & White Lakes	23B06	4700	12/28	100	38.4	24.7	26.0
			2/4	149	55.0	36.7	42.6
Four Streams	23B10	3000	12/28	62	23.6	2.4	15.1
			2/4	77	29.6	9.4	24.7
Home Sweet Home	23B05	5200	12/28	129	46.3	28.4	36.2
			2/4	197	69.0	43.8	56.5

Average based on 1958-72 average

USDA-SCS-PORTLAND, OREGON 1973-

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
MAR. 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

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SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

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STATE OF WASHINGTON

Report prepared by

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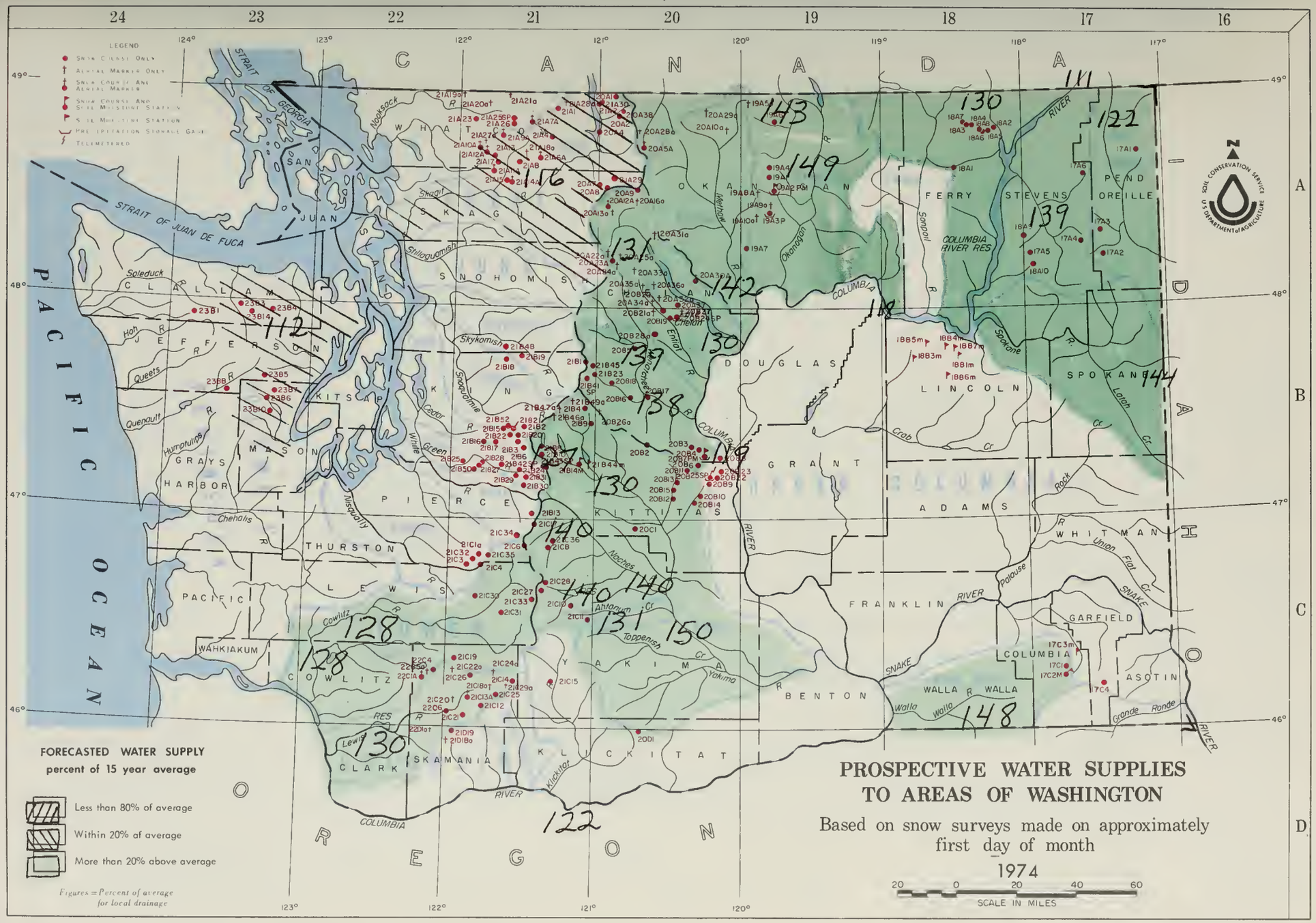
PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1974
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course and Aerial Marker
Snow Course and Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
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Chelan
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Grande Ronde
Walla Walla
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Naches
Cowlitz
Lewis
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Rock Cr
Lake Roosevelt
Banks Lake
Moses Lake
Potholes Res
Lake Chelan
Lake Pend Oreille
Lake Coeur d'Alene
Lake Pend Oreille
Lake Spokane
Lake Roosevelt
Lake Chelan
Lake Pend Oreille
Lake Coeur d'Alene

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Eunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3210
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth Ranger Station	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	14	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20BB	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

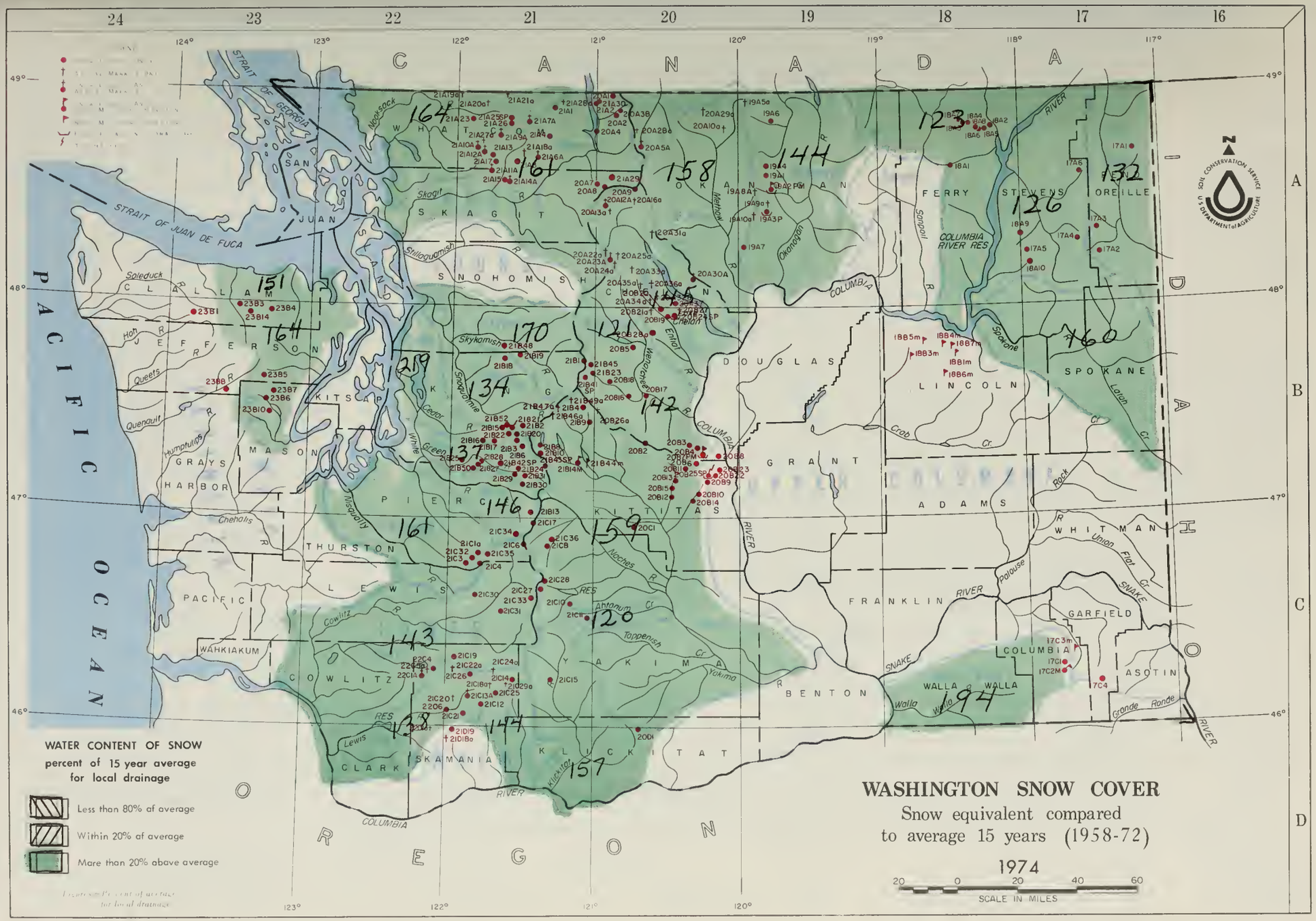
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1974
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
OREGON
PACIFIC OCEAN
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN ISLANDS
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
CHELAN
OKANOGAN
FERRY
STEVENS
PEND OREILLE
SPOKANE
LINCOLN
DOUGLAS
GRANT
ADAMS
WHITMAN
FRANKLIN
BENTON
WALLA WALLA
COLUMBIA
GARFIELD
ASOTIN
COLUMBIA RIVER RES
SNAKE RIVER
COLUMBIA RIVER
Nooksack
Skagit
Stillaguamish
Skykomish
Snoqualmie
Cedar
White
Green
Puyallup
Nisqually
Cowlitz
Lewis
Chehalis
Hoh
Queets
Quillayute
Soleduck
Humptulips
Wenatchee
Entiat
Methow
Okanogan
Sanpoil
Spokane
Little Spokane
Crab Cr
Rock Cr
Palouse
Union Flat Cr
Antanum Cr
Toppenish Cr
Yakima
Walla Walla
Grande Ronde
Klickitat
Nooksack
Chelan
Entiat
Wenatchee
Methow
Okanogan
Sanpoil
Spokane
Little Spokane
Crab Cr
Rock Cr
Palouse
Union Flat Cr
Antanum Cr
Toppenish Cr
Yakima
Walla Walla
Grande Ronde
Lewis
Klickitat
RES
164
161
158
144
123
132
126
151
164
170
121
145
160
259
134
142
137
146
161
159
120
143
138
144
157
194
124°
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U.S. DEPARTMENT of AGRICULTURE
SOIL CONSERVATION SERVICE

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	2B	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	1B	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20BB	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B1S	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C2B	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	2B	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	2S	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B4B	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A75P	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
March 1, 1974

** **
** **
** Another serious situation could develop in the watersheds of the **
** state of Washington if above normal precipitation in the form of **
** rain and snow continue for the upcoming months. The current **
** forecasts and measurements do not show that the situation is as **
** grave as did occur in 1972, but the potential for high water is **
** there. Currently, both snow course measurements and valley pre- **
** cipitation show less than was measured in 1972, but the month of **
** March is still an accumulation month and if snow and rain con- **
** tinue in the above normal manner, the flows of 1972 could be **
** reached or even exceeded. We will not know what to expect until **
** our surveys of April 1 are made, at which time, historically, the **
** maximum snow water equivalents in the upper watersheds are **
** measured. If normal conditions prevail between now and that time, **
** as well as on into the melt season, then high water can be **
** expected, but not as great as was experienced two years ago. The **
** snow cover, as of March 1, was generally less than occurred in **
** 1972 and this is a plus point in our favor toward forecasting **
** less flows than occurred at that time. There has been an **
** increase, percentagewise, from that which was measured last **
** month, which leads us to believe that the watersheds are in a **
** wettening cycle. Currently, the snow packs range from 20% above **
** normal to a high of 119% above. Precipitation during the month **
** was above normal in all drainage divisions, as reported by the **
** National Weather Service, with the exception of Central Division, **
** composed of Yakima, Wenatchee and Chelan Drainages. Reservoir **
** storage is below normal, except for Rimrock Lake, i.e., Tieton **
** Reservoir, but this has little meaning, as reservoir managers **
** will be lowering their pool levels in anticipation of the spring **
** runoff. Flows during the month were generally well above normal, **
** with only the Wenatchee, on the east side, reporting below normal **
** runoff and the Green and Skagit on the west side. **
** **
** **

SNOW COVER

The greatest snow cover, percentagewise, was measured in the Cedar River Drainage, which had a snow pack 448% greater than was measured last year at this time, 119% greater than normal and still 6% less than was measured in 1972. The Walla Walla watershed, measured by three snow courses in Washington and one in Oregon, indicate the snow cover to be 323% greater than last year, 7% greater than 1972 and 94% greater than average. There is no regional trend to the high snow covers except that it appears that west of the Cascades the situation is better than along the north boundary of the state. There are pockets of low snow, such as the Ahtanum Creeks in the Yakima watershed.

RESERVOIRS

Franklin D. Roosevelt Lake is being drawn down for the removal of the coffer dam in front of the third power house. As of March 1, storage in F. D. R. Lake was 1,175,400 acre-feet below the normal operating low elevation. Upon removal of this coffer dam, the reservoir will fill and undoubtedly spill with the subsequent spring runoff. In the Okanogan Drainage, Salmon Lake has near normal amount of water in storage, but Conconully Reservoir is still 45% less than normal and 50% below capacity. The reservoirs, both power and irrigation, will comfortably fill with the spring runoff and in all probability, uncontrolled spillage will occur. Only proper management will keep this uncontrolled spilling to a minimum.

PRECIPITATION

The continued above normal precipitation regime was experienced on all drainage divisions in Washington with the exception of the Central Division. This was reported by the National Weather Service. There has been a slight decrease, percentagewise, from that which was reported last month. During February, rainfall in the Columbia portion in Canada was 11% above normal - on the Pend Oreille-Spokane Drainage, 37% above. Northeastern Washington experienced a 26% above normal rainfall. The northwest slopes of the Cascades also had a 26% above normal precipitation.

SOIL MOISTURE

There has been very little change in the wettness of the soil mantle reported at the soil moisture stations in Washington and tributary basins. Melting has not occurred to penetrate the snow pack and infiltrate the soil, so the conditions of last month still stand.

STREAMFLOW

The Kettle River, as measured near Laurier, had the greatest flow, percentagewise, during the month of February. This was 213% of normal. The lowest flow occurred on the Green River, as measured below Howard Hansen Dam, and this was 16% below normal. Most river flows were in the 20% to 30% above normal category for the month. Forecasts of streamflow range from 11% above normal for the Birchbank station of the Columbia River to 50% above normal expected at the Yakima River, as measured near Parker. These forecasts have been increased 5% to 20% of that which was reported last month, but still only the Kettle River system is forecasted to have greater flows than occurred in 1972. Numerical forecasts can be found following this narrative statement.

STREAMFLOW FORECASTS - MARCH 1974

he following summarized runoff forecasts are based principally on mountain snow-over and on the assumption that precipitation and temperature will be near average rom the present time to the end of the forecast period. Appreciable deviations rom normal of temperature and/or precipitation will correspondingly modify these orecasts. Streamflow figures for 1973 are preliminary and subject to revision.

asin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
		COLUMBIA BASIN					
olumbia River System							
olumbia River at Birchbank 1/	51470	111	Apr-Sep	34814	56151	48708	46430
	40610	108	Apr-Jul	27879	46161	39465	37548
	29750	108	Apr-Jun	20258	33937	29725	27549
olumbia River at Grand Coulee 1/	81250	118	Apr-Sep	45834	83837	77859	68868
	67700	116	Apr-Jul	38140	71776	66456	58379
	53400	116	Apr-Jun	29814	56220	53058	46060
olumbia River bl Rock Island Dam 1/	89700	119	Apr-Sep	49262	97664	84668	75337
	75750	118	Apr-Jul	41312	84253	72806	64192
	59210	117	Apr-Jun	32102	65862	58253	50604
olumbia River at The Dalles, Or 1/	127400	122	Apr-Sep	65012	134714	126868	104670
	107900	120	Apr-Jul	54150	117896	111065	89893
	87060	119	Apr-Jun	43211	96374	91721	73158
END OREILLE RIVER SYSTEM							
end Oreille River bl. Box Canyon	19500	122	Apr-Sep	7929	20294	19052	15953
	18000	123	Apr-Jul	7338	18724	17763	14688
	15600	122	Apr-Jun	6507	16109	15357	12777
ETTLE RIVER SYSTEM							
ettle River nr. Laurier	2430	130	Apr-Sep	1106	2289	2240	1873
	2310	129	Apr-Jul	1079	2205	2177	1793
	2100	128	Apr-Jun	1010	1965	1927	1640

/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

asin, Stream and tation	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
ettle River System (Cont.)							
olville River	205	139	Apr-Sep	-	114	170	148
at Kettle Falls	190	139	Apr-Jul	-	103	158	137
	175	137	Apr-Jun	-	94	146	128
pokane River System*							
pokane River	4300	144	Apr-Sep	1121	4000	3941	2983
at Post Falls ID 2/	4200	145	Apr-Jul	1074	3874	3798	2899
	4020	145	Apr-Jun	1011	3644	3523	2773
kanogan River System							
imilkameen River							
nr. Nighthawk	2170	143	Apr-Sep	719	3259	1931	1517
	2000	141	Apr-Jul	675	3090	1840	1424
	1770	145	Apr-Jun	600	2568	1576	1222
kanogan River							
nr. Tonasket	2570	149	Apr-Sep	779	3852	2225	1723
	2340	148	Apr-Jul	719	3523	2077	1582
	2020	150	Apr-Jun	639	2895	1772	1349
ethow River System							
ethow River	1460	142	Apr-Sep	-	1959	1339	1031
nr. Pateros	1350	140	Apr-Jul	-	1819	1259	963
	1170	141	Apr-Jun	-	1524	1061	832
helan River System							
helan River	1630	130	Apr-Sep	771	1865	1550	1253
at Chelan 3/	1430	129	Apr-Jul	674	1619	1352	1112
	1145	130	Apr-Jun	540	1250	1019	881
tehekin River	1180	131	Apr-Sep	-	1235	1093	904
at Stehekin	1010	130	Apr-Jul	-	1044	927	776
	785	131	Apr-Jun	-	772	657	600
ntiat	320	134	Apr-Sep	-	398	310	239
nr. Ardenvoir	295	134	Apr-Jul	-	361	280	220
	240	133	Apr-Jun	-	283	209	180

Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho
/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.
/ Observed flow corrected for storage in Lake Chelan.

asin, Stream and tation	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
enatchee River System							
enatchee River	1830	139	Apr-Sep	-	1926	1637	1312
at Plain	1650	139	Apr-Jul	-	1686	1448	1187
	1270	133	Apr-Jun	-	1272	1045	956
enatchee River	2460	138	Apr-Sep	1055	2787	2241	1786
at Peshastin	2260	139	Apr-Jul	964	2464	1999	1629
	1840	139	Apr-Jun	823	1883	1454	1324
temilt Basin	145	105	May-Sep	-	145*	148*	138*
nr Wenatchee							
akima River System							
akima River	180	127	Apr-Sep	85	220	191	142
nr. Martin 4/	165	126	Apr-Jul	78	198	179	131
	145	125	Apr-Jun	72	167	139	116
akima River	1250	130	Apr-Sep	-	1515	1305	965
at Cle Elum 5/	1140	130	Apr-Jul	-	1374	1178	877
	1000	131	Apr-Jun	-	1156	936	764
akima River	2600	150	Apr-Sep	-	3231	2401	1730
nr. Parker 6/	2550	150	Apr-Jul	-	3071	2327	1701
	2370	150	Apr-Jun	-	2694	1961	1580
achess River	165	132	Apr-Sep	67	195	172	125
nr. Easton 7/	155	131	Apr-Jul	63	182	163	118
	140	132	Apr-Jun	59	153	131	106
le Elum River	650	136	Apr-Sep	280	747	624	477
nr Roslyn 8/	600	137	Apr-Jul	254	671	565	437
	490	132	Apr-Jun	220	537	432	372

Thousands of Miners' Inches.
/ Observed flow corrected for storage in Lake Keechelus.
/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
/ Observed flow corrected for storage in Lake Kachess.
/ Observed flow corrected for storage in Lake Cle Elum.

asin, Stream and cation	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
akima River System (Cont.)							
umping River	205	140	Apr-Sep	73	228	193	146
nr. Nile 9/	190	142	Apr-Jul	66	203	174	134
	160	143	Apr-Jun	59	155	125	112
merican River	175	137	Apr-Sep	-	186	172	128
nr. Nile	160	136	Apr-Jul	-	169	154	118
	136	136	Apr-Jun	-	137	113	100
ieton River	345	140	Apr-Sep	161	407	325	247
at Tieton Dam 10/	295	140	Apr-Jul	128	342	271	211
	240	140	Apr-Jun	102	267	199	172
aches River	1245	140	Apr-Sep	-	1477	1168	889
nr. Naches 11/	1135	140	Apr-Jul	-	1339	1055	810
	975	140	Apr-Jun	-	1106	833	698
ntanum Creek	63	131	Apr-Sep	-	75	63	48
nr. Tampico 12/	58	132	Apr-Jul	-	69	57	44
	53	136	Apr-Jun	-	59	48	39
ower Columbia River System							
11 Creek							
nr. Walla Walla	40	148	Apr-Sep	-	34	30	27
	35	146	Apr-Jul	-	29	26	24
	30	143	Apr-Jun	-	26	24	21
ewis River	1740	130	Apr-Sep	773	1597	1827	1342
at Ariel 13/	1525	130	Apr-Jul	642	1392	1605	1174
	1390	132	Apr-Jun	556	1236	1341	1052
owlitz River	2700	128	Apr-Sep	-	3048	2800	2106
Blw. Mayfield Dam	2400	130	Apr-Jul	-	2672	2463	1846
	2000	127	Apr-Jun	-	2201	1935	1578
owlitz River	3550	128	Apr-Sep	1561	3819	3710	2768
at Castle Rock 14/	3150	130	Apr-Jul	1344	3331	3253	2416
	2650	127	Apr-Jun	1168	2782	2585	2083

/ Observed flow corrected for storage in Bumping Lake.
0/ Observed flow corrected for storage in Rimrock Lake.
1/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
2/ Observed flow of North and South Forks (combined)
3/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
4/ Observed flow corrected for storage in Mayfield Reservoir.

asin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr. Average 58-72
		PUGET SOUND					
kagit River System							
kagit River at Newhalem 15/	2830	116	Mar-Aug	-	3800	2903	2418
		OLYMPIC PENINSULA					
ngeness River System							
ngeness River nr. Sequim	185	112	Apr-Sep	-	207	196	165
	155	113	Apr-Jul	-	171	154	137
	116	112	Apr-Jun	-	127	105	104

5/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about March 1, 1974 as percent of the same date in 1973 and 1972 and average of record

Tributary Basin	No. of Courses Average	1974 Snow Water Expressed as percent of 1973	1972	1958-72 Avg.
		UPPER COLUMBIA BASIN		
Pend Oreille	15	258	102	132
Kettle	17	180	103	123
Colville	4	198	128	126
Spokane	7	382	106	160
Okanogan	38	210	97	144
Methow	10	226	103	158
Chelan	7	186	93	145
Entiat	9	190	84	121
Wenatchee	11	287	80	142
Yakima	25	309	83	159
Ahtanum	2	214	72	120
		LOWER COLUMBIA		
Mill Creek	4	423	107	194
Klickitat	1	-	87	157
White Salmon	2	312	81	144
Lewis	18	375	79	138
Cowlitz	10	396	78	143
		PUGET SOUND		
Nisqually	4	239	78	161
White	2	226	84	146
Green	7	339	77	137
Cedar	6	548	94	219
Snoqualmie	2	276	76	134
Skykomish	3	357	102	170
Skagit	14	262	84	161
Nooksack	5	232	108	164
		OLYMPIC PENINSULA		
Skokomish	4	250	110	164
Elwha	1	250	102	151

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (March) 1974	1973	1972	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	127.9	53.3	248.0	162.4
Columbia	Franklin D. Roosevelt Lake	5232.0	-1175.4	3729.1	2735.6	2843.8
Columbia	Banks Lake	761.8	720.3	613.3	714.9	588.3
Okanogan	Conconully Reservoir	13.0	6.4	11.6	9.6	11.6
Okanogan	Salmon Lake	10.5	7.3	9.5	8.6	7.4
Chelan	Lake Chelan	676.1	228.5	141.4	126.5	234.9
		YAKIMA				
Yakima	Keechelus Lake	157.8	99.4	102.0	151.9	105.5
Kachess	Kachess Lake	239.0	107.9	195.0	179.0	183.6
Cle Elum	Lake Cle Elum	436.9	195.7	319.1	312.1	264.5
Bumping	Bumping Lake	33.7	4.7	9.1	9.2	10.2
Tieton	Rimrock Lake	198.0	132.1	153.3	139.6	128.2
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	1030.4	870.3	680.1	873.9
Skagit	Diablo Reservoir	90.6	86.4	89.0	83.8	85.0
Skagit	Gorge Reservoir	9.8	8.2	8.1	7.3	-

1/ Based on Active Storage

* 15-year Average 1958-72

SOIL MOISTURE - MARCH

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of March 1 1974	1973	1972
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	3.7	2.3	3.6
Trout Creek	3-M	3600	48	7.3	3.8*	3.2*	4.3*
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	4.9	5.2	-
Lake Cle Elum	21B14M	2200	48	12.8	9.3	9.2	-
WALLA WALLA							
Couse	17C3m	3650	48	11.1	10.3	7.6	10.8
Helmers	17C2M	4400	48	12.0	10.1	10.6	11.6
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	5.7	8.9	10.0

* February Readings

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1973	1972	1971
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	2.6	2.8	2.7
Trout Creek	3-M	3600	48	7.3	2.8	3.3	3.3
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	2.6	4.1	2.1
Lake Cle Elum	21B14M	2200	48	12.8	6.1	8.7	7.1
WALLA WALLA							
Couse	17C3m	3650	48	11.1	5.6	6.0	6.2
Helmers	17C2M	4400	48	12.0	7.6	7.7	8.2
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	6.0	5.7	6.5

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct Average	1973 2/ Departure	WINTER Nov. 1973 - Feb. 1974 2/ Average	Departure
Columbia in Canada	5.14	+ 0.67	14.00	+ 2.79
Pend Oreille - Spokane	4.28	- 0.20	28.18	+12.17
Northeastern Washington	3.36	- 0.58	15.95	+ 6.39
Southeastern Washington	3.71	+ 0.48	19.00	+ 7.78
Central Washington	4.68	- 0.07	32.59	+ 8.39
North Central Washington	3.44	+ 1.82	8.39	+ 2.48
Northwest Slope Cascades	11.53	- 1.16	60.67	+16.26
Southwest Slope Cascades	9.69	+ 1.01	49.17	+13.69

Northeastern Washington - Lower Spokane, Colville, Sanpoil and lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

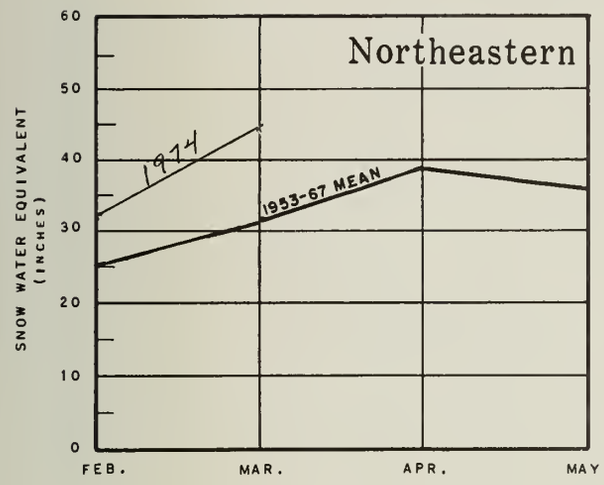
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service

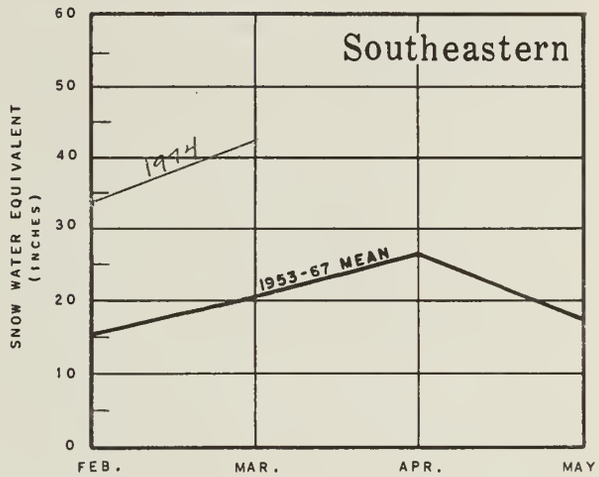
2/ - Departure from 15-year (1958-72) drainage division average.

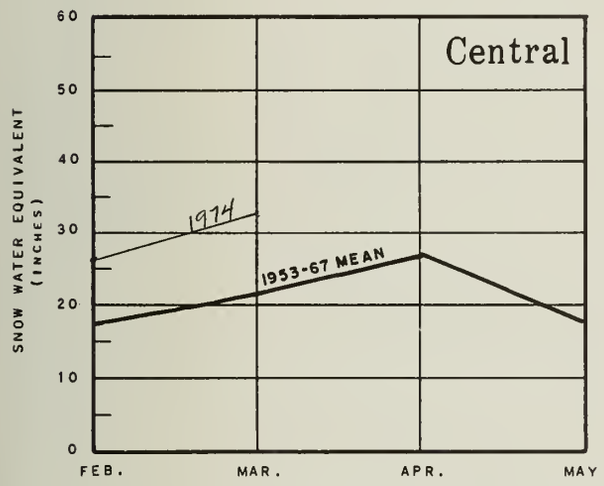
WASHINGTON SNOW COVER

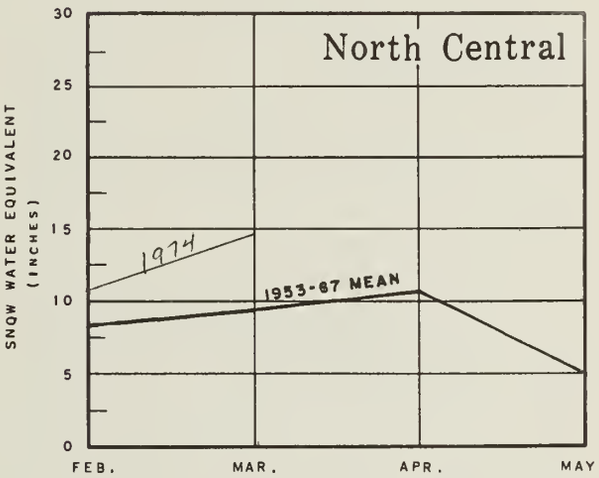
1974

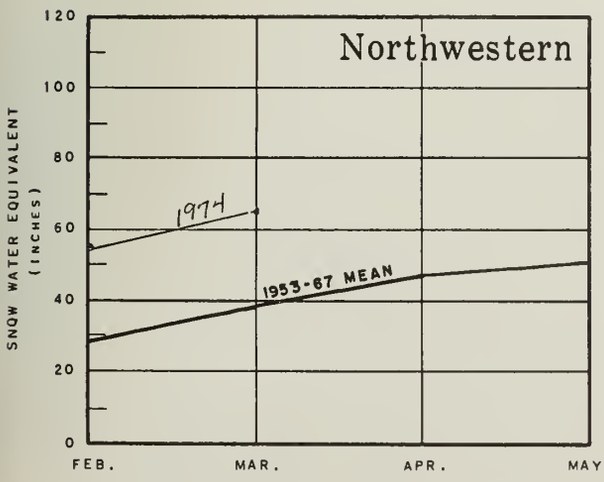
DRAINAGE AREAS

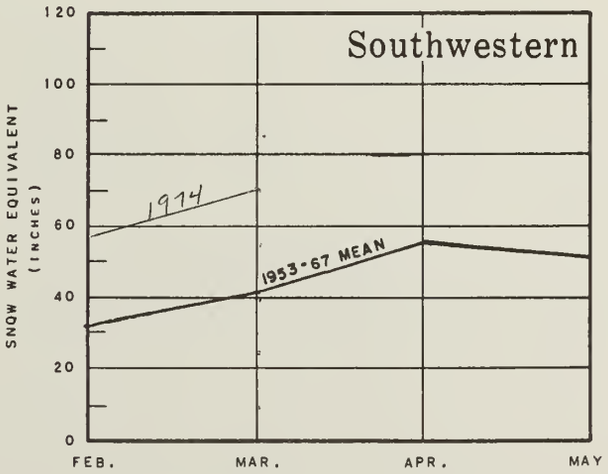










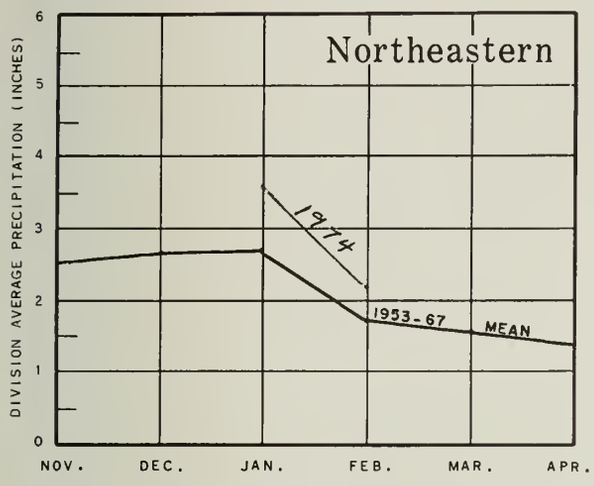


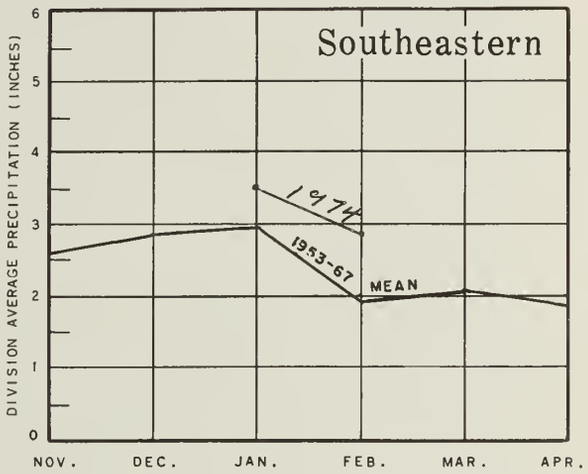
Selected Snow Survey Courses by Soil Conservation Service

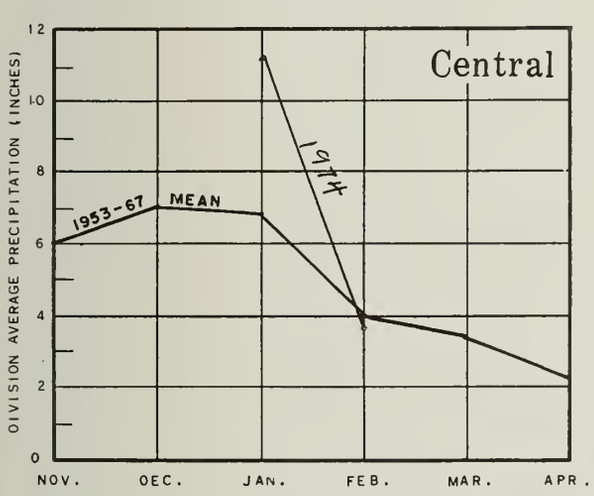
WASHINGTON VALLEY PRECIPITATION

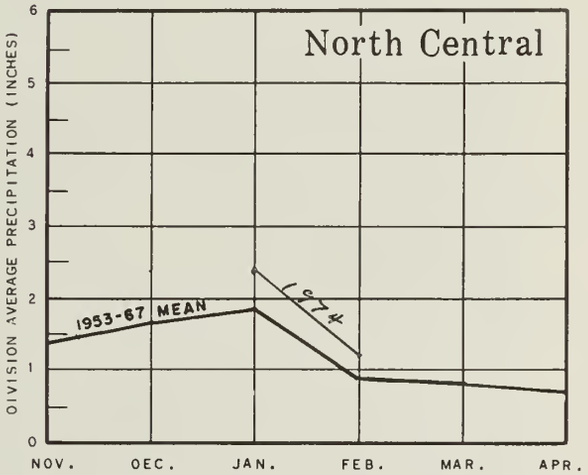
1974

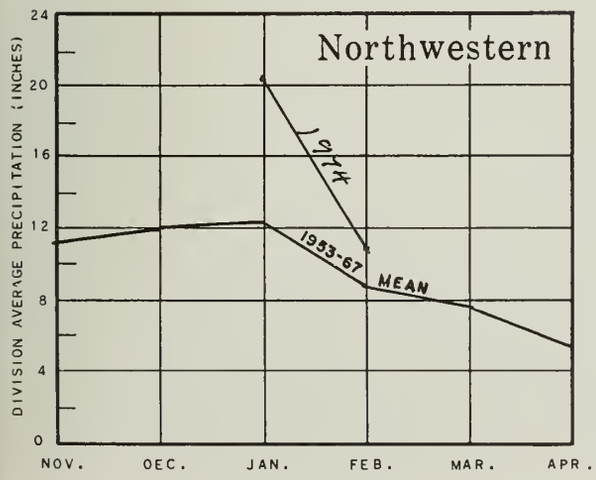
DRAINAGE AREAS

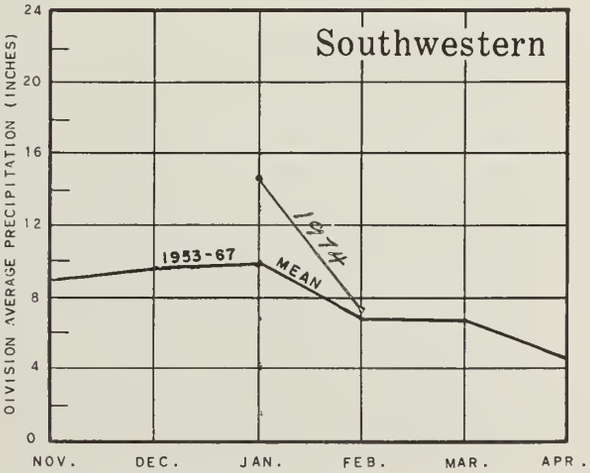












Preliminary Analysis by National Weather Service

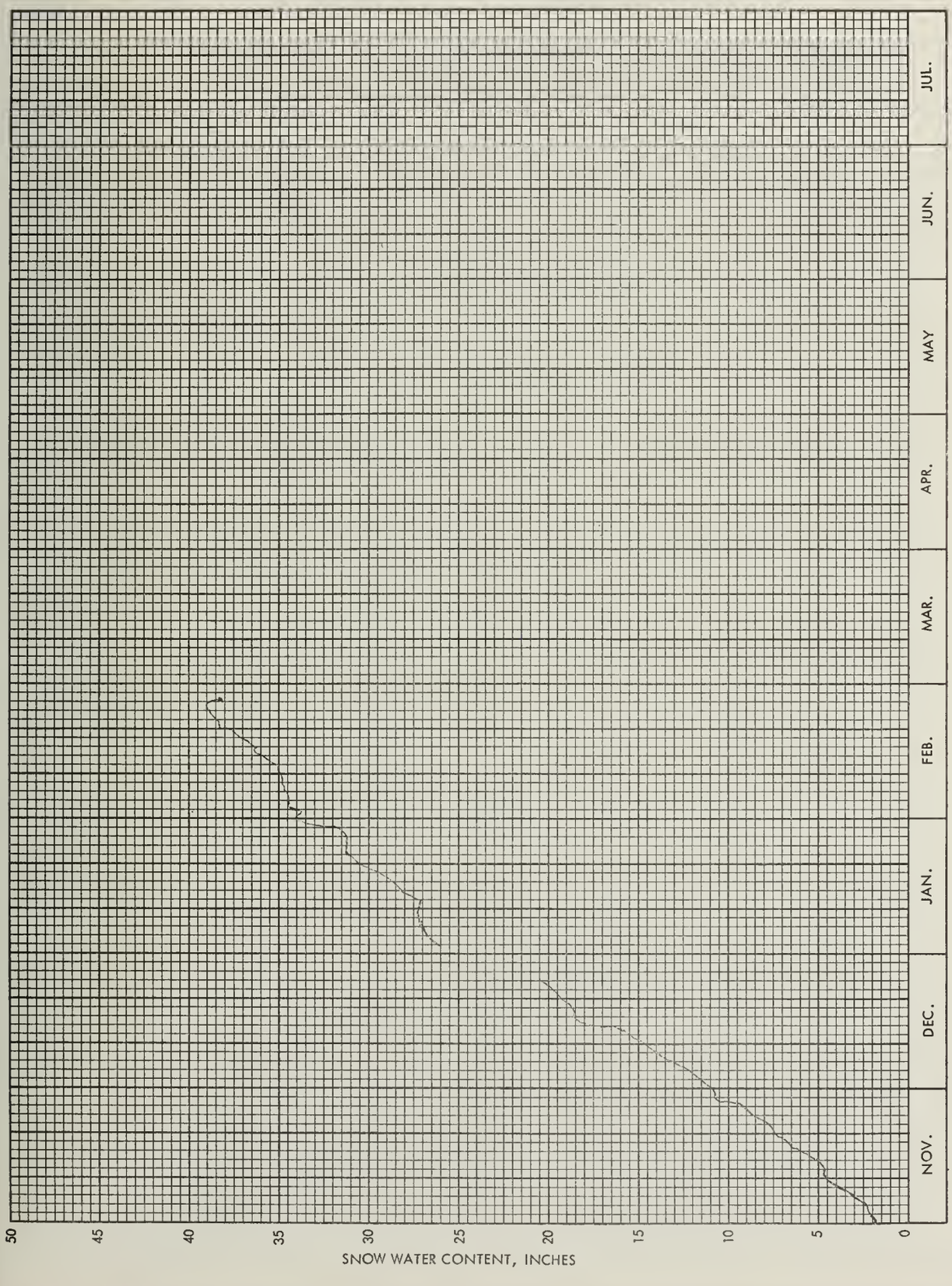
SNOW PILLOW DATA

Berne-Mill Creek

1973-74

Sec. 13 T. 26N R. 14E No. 21B41GP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42" Elev. 3240



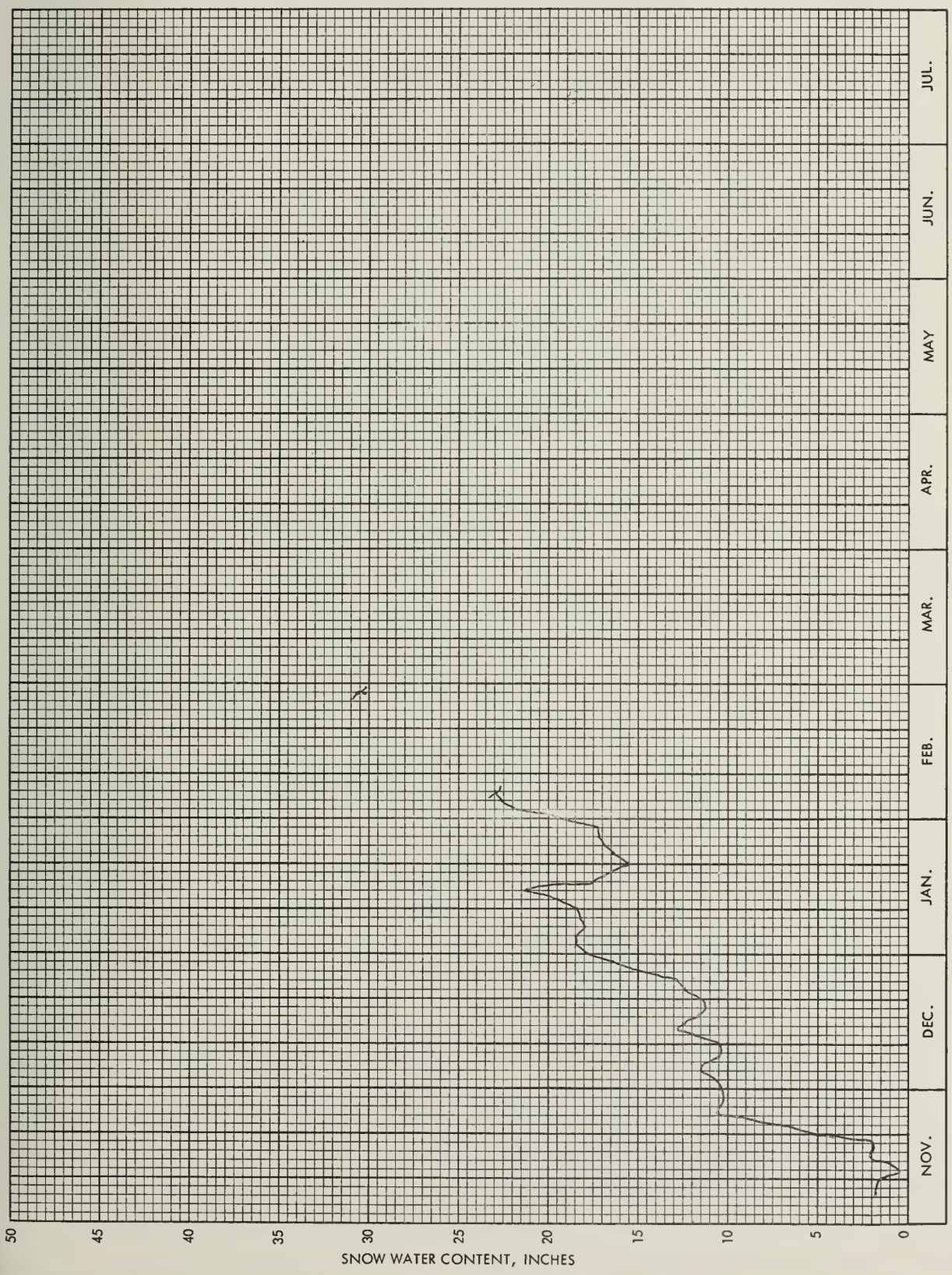
COUGAR MOUNTAIN - FS

SNOW PILLOW DATA

AS OF MARCH 1, 1974

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 120° 40' Elev. 3200'



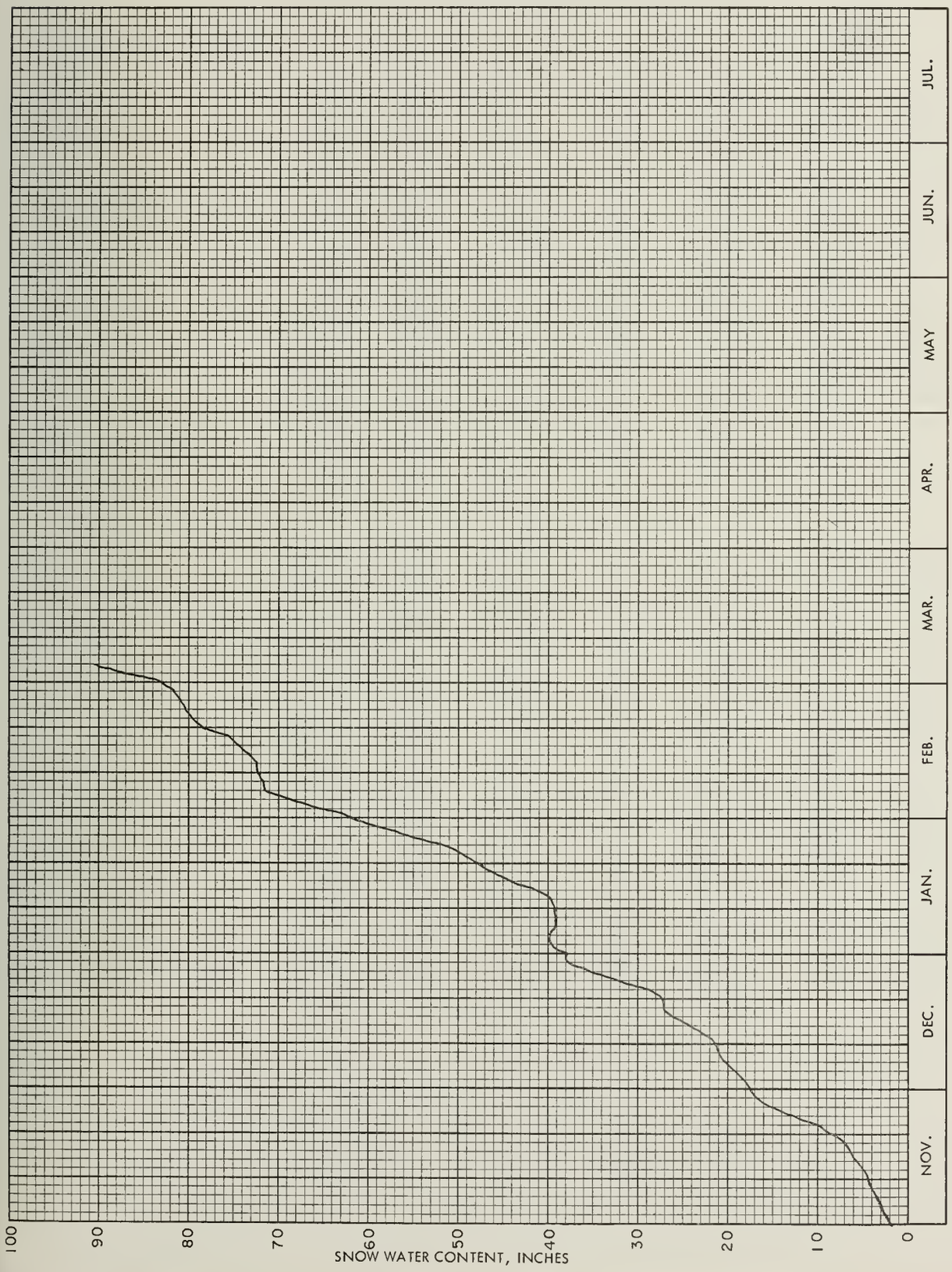
SNOWSHOE BUTTE - FS

SNOW PILLOW DATA

AS OF MARCH 1, 1974

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Long. 121° 22' Elev. 5000'



WSFB-X4-L

SNOW DATA TO MARCH 1, 1974 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	3/1	164	65.6	29.7	43.6
Baree Midway	15B16	4600	3/1	132	47.5	19.9	34.6
Baree Trail	15B15	3800	3/1	40	13.1	1.6	10.5
Benton Meadow	16A02	2344	2/25	18	4.0	2.7	6.1
Benton Spring	16A03	4900	2/25	80	28.9	12.6	17.4
Boyer Mountain	17A02	5250	2/26	104	39.0	17.8	23.7
Brush Creek Timber	14A04	5000	2/25	39	11.0	6.6	10.2
Heart Lake Trail	14C10	4800	3/1	89	28.6	8.2	21.2
Hoodoo Basin	15C10	6000	3/1	169	63.4	31.5	46.1
Hoodoo Creek	15C01	5900	3/1	163	58.6	29.4	43.2
Lookout	15B02	5250	2/26	130	43.7	17.9	32.7
Mosquito Ridge	16A04A	5100	3/7	149	54.4	24.2	34.7
Nelson	19-Can	3050	2/28	77	20.0	10.6	14.5*
Schweitzer Bowl	16A06	4500	3/1	130	49.5	21.2	-
Schweitzer Ridge	16A05	6100	3/1	166	61.5	32.0	-
Winchester Creek	17A03	2970	2/26	53	13.8	6.2	12.1
KETTLE RIVER							
Barnes Creek	90-Can	5300	3/3	72	22.0	13.8	18.0*
Big White Mountain	154-Can	5500	2/26	69	26.6	14.1	16.9*
Boulder Road	18A02	1450	2/27	8	2.2	2.2	4.9
Butte Creek	18A03	4070	2/27	39	10.2	7.1	9.3
Cabin Creek	18A08	3170	2/27	36	9.8	5.7	8.2
Carmi	126-Can	4100	2/26	32	8.0	3.8	6.1*
Farron # 1	17-Can	4000	2/27	60	17.8	11.4	12.4*
Farron # 2	243-Can	4000	2/27	58	17.7	10.2	New Course
Goat Creek	18A04	3595	2/27	32	8.7	4.9	7.1
Graystoke Lake	5-Can	5950	2/25	72	23.8	13.8	18.7*
Monashee Pass	48A-Can	4500	3/1	50	13.2	10.3	12.7*
Old Glory Mountain	42-Can	7000	2/24	110	38.0	20.2	24.6*
Snow Caps Creek	18A05	2150	2/27	21	6.1	2.5	5.1
Snow Caps Trail	18A06	2720	2/27	28	7.2	3.0	6.7
Summit G. S.	18A07	4600	2/27	32	10.1	6.0	7.4
Trapping Creek Lower	166-Can	3050	2/26	28	7.0	2.7	5.1*
Trapping Creek Upper	165-Can	4450	2/26	49	13.4	7.6	8.9*

Average based on 1958-72 average
* Average for years of record

USDA-SCS-PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1974 - APPENDIX 2

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COLVILLE RIVER							
Baird	17A06	3215	2/27	36	9.5	5.7	7.1
Carlson	18A09	2885	3/2	11	2.4	2.3	4.6
Stranger Mountain	17A05	4990	3/2	68	21.8	8.9	13.1
Togo	18A10	3370	3/2	55	16.6	6.0	10.9
SPOKANE RIVER							
Above Burke	15B08	4100	2/26	91	27.0	8.7	--
Copper Ridge	16B02	4800	2/28	125	45.1	10.7	25.7
Forty-nine Meadows	15B02	5000	Late Report			14.6	--
Fourth of July Summit	16B03	3100	3/4	48	13.5	1.9	7.3
Granite Peak	15B13A	6000	Late Report			26.3	--
Lookout	15B02	5250	2/26	130	43.7	17.9	32.7
Lost Lake	15B14A	6000	Late Report			30.7	--
Lower Sands Creek	16B01	3400	2/26	84	26.8	7.1	17.5
Medicine Ridge	15B04A	6150	Late Report			25.9	--
Mosquito Ridge	16A04A	5110	3/7	149	54.4	24.2	34.7
Roland Summit	15B05A	5200	3/7	166	54.1	--	31.3
Sherwin	16C01	3200	2/26	60	20.0	5.2	13.8
Sunset	15B09A	5600	Marker Buried			--	--
Kellogg Peak	16B05A	5560	3/7	125	41.4	--	--
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	2/28	30	7.3	3.7	5.9*
Blackwall Mountain	100-Can	6250	2/22	119	42.6	22.0	32.4*
Bouleau Creek	31-Can	5000	2/27	46	13.5	8.3	10.5*
Bouleau Lake	234-Can	4580	2/27	60	16.0	9.8	13.3*
Brenda Mine	193-Can	4800	2/26	54	15.6	9.4	12.8*
Brookmere	27-Can	3200	2/27	40	11.9	4.5	9.0*
Carrs Landing Upper	168-Can	3200	3/1	20	4.6	2.6	4.5*
Clark +	19A08a	7000	3/2	78	26.5	-	19.7
Enderby	130-Can	6250	2/25	130	42.7	26.9	32.4*
Esperon Creek Lower	164-Can	4400	2/25	54	15.0	8.4	10.9*
Esperon Creek Middle	163-Can	4700	2/25	66	20.5	9.9	13.5*
Esperon Creek Upper	162-Can	5400	2/25	76	25.0	10.4	16.5*
Freezeout Meadows New	20A38	5000	3/7	179	73.3	19.9	--
Graystoke Lake	5-Can	5950	2/25	72	23.8	13.8	18.7*
Hamilton Hill	107-Can	4900	2/25	58	10.7	9.7	14.2*
Harts Pass	20A05A	6500	3/3	163	64.4	29.3	38.5
Horseshoe Basin +	19A05a	7000	3/3	63	21.4	10.2	11.6

\# Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO MARCH 1, 1974 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Isintok Lake	152-Can	5510	3/3	42	12.3	5.8	7.5*
Lost Horse Mountain	105-Can	6300	2/28	44	12.7	6.1	8.5*
Loup Loup	19A07	4650	2/26	50	15.4	6.6	9.5
McCulloch	4-Can	4200	2/24	38	8.4	4.3	6.2*
Missezula Mountain	106-Can	5100	2/24	47	13.9	-	8.8*
Mission Creek	5A-Can	6000	2/27	81	25.6	12.4	17.3*
Monashee Pass	48A-Can	4500	3/1	50	13.2	10.3	12.7*
Mount Kobau	156-Can	5950	2/28	60	19.2	7.4	11.8*
Muckamuck +	19A09a	6390	3/2	73	24.8	-	15.1
Mutton Creek No. 1	19A01	5700	2/26	67	22.4	9.5	12.9
Mutton Creek No. 2	19A04	6000	2/26	63	21.4	8.9	13.3
Mutton Creek No. 2 SP	19A11SP	6000	2/26	-	17.4	6.4	New
New Copper Mountain	46A-Can	4300	2/26	30	8.4	3.7	5.8*
New Penticton Res. # 2	183-Can	5225	3/2	45	10.9	5.6	7.6*
Nickel Plate Mountain	47-Can	6200	2/27	45	12.0	4.5	7.1*
Oyama Lake	203-Can	4400	2/26	31	8.6	5.7	6.3*
Paysayten +	20A28a	4300	3/3	66	22.4	9.9	15.4
Postill Lake	55-Can	4500	2/28	41	10.5	5.0	7.4*
Quartette Lake	34-Can	4000	2/26	51	17.3	6.6	-
Rusty Creek	19A03	4000	2/25	37	11.8	4.6	7.1
Salmon Meadows	19A02	4500	2/26	50	14.8	6.8	9.9
Silver Star Mountain	99-Can	6050	2/25	101	35.9	19.2	23.8*
Starvation Mountain +	19A10a	6750	3/2	78	26.5	-	18.3
Summerland Reservoir	3A-Can	4200	3/3	41	12.1	6.0	8.7*
Touts Coulee	19A06	2845	2/27	21	5.7	2.2	4.0
Trout Creek	3-Can	4700	2/26	38	9.4	4.8	6.4*
Vasseux Creek	233-Can	4600	3/2	41	11.2	3.8	7.2*
White Rocks Mountain	70-Can	6000	2/27	89	30.9	16.6	18.9*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	2/28	138	44.7	26.9	New
Brief	20B19	1600	2/26	18	6.6	-	7.5
Entiat Meadows +	20A33a	4800	2/28	174	56.4	31.7	45.7
Entiat River Trail +	20A34a	3150	2/28	88	28.5	11.9	21.8
Four Mile Ridge +	20B27a	7000	2/28	124	40.2	20.7	-
Fox Camp +	20A36a	6510	2/28	182	59.0	37.9	54.6
Pope Ridge	20B20	4300	2/26	80	25.9	11.7	16.5
Pugh Ridge +	20A32a	6400	2/28	125	40.5	25.5	34.5
Shady Pass	20A37	6200	Not Measured			19.8	-
Snow Brushy +	20A35a	3850	2/28	141	45.7	25.8	37.7
Tommy Creek +	20B21a	5300	2/28	108	35.0	15.7	28.3

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO MARCH 1, 1974 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average #
METHOW RIVER							
Billy Goat Pass +	20A10a	6409	3/3	102	36.7	-	25.8
Dollar Watch +	20A29a	7000	3/3	102	34.7	17.6	25.8
Harts Pass	20A05A	6500	3/3	163	64.4	29.3	38.5
Horseshoe Basin +	19A05a	7000	3/3	63	21.4	10.2	11.6
Loup Loup	19A07	4650	2/26	50	15.4	6.6	9.5
Mutton Creek No. 1	19A01	5700	2/26	67	22.4	9.5	12.9
Mutton Creek No. 2	19A04	6000	2/26	63	21.4	8.9	13.3
Mutton Creek No. 2 SP	19A11SP	6000	2/26	-	17.4	6.4	New
Rusty Creek	19A03	4000	2/25	37	11.8	4.6	7.1
Salmon Meadows	19A02	4500	2/26	50	14.8	6.8	9.9
War Creek Pass +	20A31a	6500	3/2	153	55.1	31.1	40.5
CHELAN LAKE BASIN							
Greenwood Flat +	20A25a	3540	3/3	100	36.0	18.9	22.9
Little Meadows +	20A24a	5275	3/2	180	64.8	32.6	39.9
Lyman Lake	20A23A	5900	Marker Down			44.0	52.5
Park Creek Flat +	20A13a	2220	3/3	121	43.6	20.4	31.4
Park Creek Ridge	20A12A	4600	3/3	182	65.5	35.9	41.9
Petersons +	20A16a	3730	3/3	112	40.3	26.6	32.9
Rainy Pass	20A09	4780	3/3	144	51.4	27.4	36.0
Safety Harbor	20A30A	6300	Marker Buried			22.2	25.7
War Creek Pass +	20A31a	6500	3/2	153	55.1	31.1	40.5
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	2/14	102	36.3	15.0	23.9
			2/27	111	43.0	14.7	24.7
Berne-Mill Creek New SP	21B41SP	3240	2/27	100	38.0	11.7	21.0
Blewett Pass No. 2	20B02	4270	2/26	66	22.5	6.9	14.9
Chiwaukum G. S.	20B16	1810	2/14	46	15.2	4.5	11.2
			2/27	49	17.0	4.7	11.6
Fish Lake	21B04	3371	2/26	125	45.2	17.8	31.3
Lake Wenatchee	20B05	1970	2/14	49	17.6	6.2	13.6
			2/27	51	19.7	6.2	13.9
Leavenworth R. S.	20B17	1127	2/15	6	2.3	3.1	5.7
			3/1	8	2.5	1.4	4.2
Lyman Lake	20A23A	5900	Marker Down			44.0	52.5
Merritt	20B18	2140	2/14	56	21.6	7.8	15.5
			2/27	59	22.9	7.8	15.2

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973.

SNOW DATA TO MARCH 1, 1974 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average#
WENATCHEE RIVER (Cont.)							
Stevens Pass	21B01	4070	2/14	163	63.7	29.6	42.5
			2/27	185	73.5	29.6	45.7
Stevens Pass Sand Shed	21B45	3700	2/14	136	52.3	18.0	-
			2/27	147	57.0	18.3	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	2/27	39	14.5	5.8	7.9
Scout-A-Vista	20B04	3400	2/27	44	13.3	5.8	8.1
STEMILT CREEK							
Jump-Off	20B08	4450	2/25	41	13.6	7.2	8.3
Stemilt Slide	20B06	5000	2/26	60	21.9	10.6	15.1
Upper Wheeler	20B07	4400	2/26	39	13.0	6.6	10.1
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	2/8	47	15.5	8.3	-
			2/25	56	21.3	9.5	-
Colockum Creek Lower	20B23	4300	2/25	39	11.5	6.2	-
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	2/27	23	7.6	3.2	6.7
Big Boulder Creek	21B09	3200	2/26	88	31.6	8.9	18.5
Blewett Pass No. 2	20B02	4270	2/26	66	22.5	6.9	14.9
Bumping Lake	21C08	3450	2/12	66	21.1	7.9	15.2
			3/1	79	25.9	7.7	15.3
Bumping Lake New	21C36	3400	2/12	77	26.6	9.6	19.6
			3/1	95	31.9	10.2	20.0
Cayuse Pass	21C06	5300	2/27	257	99.5	45.4	70.4
Colockum Pass	20B09	5370	2/25	63	21.6	9.9	14.5
Cooke Creek	20B10	4123	2/25	36	11.0	3.5	6.1
Corral Pass	21B13	6000	3/7	154	52.0	22.2	34.5
Fish Lake	21B04	3371	2/26	125	45.2	17.8	31.3
Green Lake	21C10	6000	2/26	115	37.3	19.7	29.1
Grouse Camp	20B11	5385	2/26	71	24.3	-	15.3
High Creek	20B12	2930	2/26	28	9.1	3.7	5.2
Joe Lake +	21B46a	4624	2/27	225	81.0	27.8	-
Lake Cle Elum	21B14M	2200	2/15	28	9.8	-	8.2
			2/28	37	11.9	1.8	8.1
Lemah Creek +	21B47a	3327	2/27	153	55.1	22.2	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO MARCH 1, 1974 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average #
YAKIMA RIVER (Cont.)							
Manashtash	20C01	3935	2/22	24	6.6	2.0	4.3
Morse Lake	21C17	5400	Not Measured			36.5	47.5
Nanum	20B13	2340	2/26	47	14.4	-	9.6
Olallie Meadows	21B02	3625	3/7	214	81.1	15.0	40.6
Satus Pass	20D01	4030	2/28	54	13.7	0.0	8.7
Stampede Pass SP	21B10	3860	2/14	-	60.0	19.0	34.2
			Pillow Flat			20.6	36.2
Trail Creek	20B14	3360	2/25	14	5.0	0.0	2.2
Tunnel Avenue	21B08	2450	2/14	85	28.8	10.2	20.1
			2/28	94	32.6	9.6	21.2
Van Epps Pass +	20B26a	5925	2/27	173	62.3	27.4	-
Walters Flat	20B15	3360	2/26	38	11.0	3.4	6.9
Waptus Lake +	21B49a	3024	2/27	144	51.8	21.1	-
White Pass (E. Side)	21C28	4500	2/13	85	27.7	9.3	20.8
			2/28	106	35.9	10.1	22.0
White Pass (L. Lake)	21C27	4500	2/26	108	35.9	11.2	26.1
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	2/27	23	7.6	3.2	6.7
Green Lake	21C10	6000	2/26	115	37.3	19.7	29.1
LOWER COLUMBIA							
ASOTIN CREEK							
Spruce Springs	17C04	5700	2/28	96	34.6	11.0	23.6
MILL CREEK							
Homestead	17C01	4030	2/27	47	17.2	3.5	7.4
Martin Springs	17C02	4400	2/27	69	23.5	4.4	11.9
Tollgate	18D3M	5070	2/28	117	42.4	12.0	21.1
KLICKITAT RIVER							
Satus Pass	20D01	4030	2/28	54	13.7	0.0	8.7
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	2/24	154	57.4	19.3	40.5
Surprise Lakes	21C13A	4250	2/24	168	64.0	19.5	44.2

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON/1973.

WSFB-X4-L

SNOW DATA TO MARCH 1, 1974 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WIND RIVER							
Old Man Pass	21D19	3100	2/24	71	23.4	5.2	17.2
LEWIS RIVER							
Blue Lake +	21C22a	4800	2/24	254	96.5	38.5	69.7
Bob's Trail	21C21	2200	2/24	56	20.3	3.3	14.2
Calamity Ridge +	22D01a	2500	2/24	12	4.2	0.3	6.7
Council Pass +	21C18a	4200	2/24	149	56.6	19.6	37.1
Cultus Creek	21C12	4000	2/24	154	57.4	19.3	40.5
Divide Meadow +	21C29a	5600	2/24	168	63.8	23.6	50.9
Grand Meadow	21C25	3500	2/24	96	35.2	9.5	23.8
Lone Pine Shelter	21C26	3800	2/27	169	59.6	15.9	35.0
Marble Mountain +	22C05a	3200	2/24	126	54.2	9.4	31.4
Mosquito Meadows	21C19	4100	2/27	156	52.8	16.7	36.6
New Muddy River	22C06	2000	2/24	17	5.9	0.0	10.6
Old Man Pass	21D19	3100	2/24	71	23.4	5.2	17.2
Plains of Abraham +	22C01a	4400	2/24	207	80.7	34.8	58.5
Smith Creek Road	22C04	2100	2/24	49	19.8	5.2	17.2
Spencer Meadow +	21C20a	3400	2/24	101	37.4	8.0	21.5
Surprise Lakes	21C13A	4250	2/24	168	64.0	19.5	44.2
Table Mountain +	21C24a	4200	2/24	168	63.8	22.8	41.7
Timbered Peak +	21D18a	3000	2/24	74	25.9	5.2	16.0
COWLITZ RIVER							
Cayuse Pass	21C06	5300	2/27	257	99.5	45.4	70.4
Mosquito Meadows	21C19	4100	2/27	156	52.8	16.7	36.6
Ohanapecosh	21C32	2200	2/27	54	18.9	3.0	15.8
Packwood Lake	21C31	2870	2/25	53	19.2	2.0	12.7
Pigtail Peak	21C33	5900	2/15	Not Measured		31.2	55.1
			2/26	186	69.8	33.0	57.2
Plains of Abraham +	22C01a	4400	2/24	207	80.7	34.8	58.5
Potato Hill	21C14	4500	2/28	128	43.1	14.0	28.8
White Pass (E. Side)	21C28	4500	2/13	85	27.7	9.3	20.8
			2/28	106	35.9	10.1	22.0
White Pass (L. Lake)	21C27	4500	2/15	Not Measured		-	20.7
			2/26	108	35.9	11.2	26.1
Willame Creek	21C30	3250	2/26	118	43.6	10.6	26.9

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS-PORTLAND, OREGON 1973.

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SNOW DATA TO MARCH 1, 1974 - APPENDIX 8

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	2/25	160	58.5	22.0	39.0
Longmire	21C03	2760	2/25	50	19.7	1.5	9.0
New Paradise Park	21C35	5500	2/25	219	87.2	38.4	61.8
Stem Glade	21C01	5050	2/25	216	80.7	36.1	60.5
WHITE RIVER							
Cayuse Pass	21C06	5300	2/27	257	99.5	45.4	70.4
Corral Pass	21B13	6000	3/7	154	52.0	22.2	34.5
Morse Lake	21C17	5400	Not Measured			36.5	47.5
GREEN RIVER							
Airstrip	21B24	1800	3/3	7	2.0	0.0	4.4
Charley Creek	21B25	1200	3/3	0	0.0	0.0	1.2
Cougar Mountain SP	21B42SP	3200	2/28	83	31.0	7.6	-
Grass Mtn. No. 2	21B27	2900	3/3	95	34.7	8.5	19.4
Grass Mtn. No. 3	21B28	2100	3/3	17	5.8	0.0	5.7
Lester Creek	21B29	3100	3/3	106	35.8	10.9	21.3
Lynn Lake	21B50	4000	Not Measured			4.2	-
Sawmill Ridge	21B31	4700	3/3	148	52.4	16.1	34.1
Snowshoe Butte SP	21B43SP	5000	3/7	222	90.6	29.0	-
Stampede Pass SP	21B10	3860	2/14	-	60.0	19.0	34.2
			Pillow Flat			20.6	36.2
Twin Camp	21B30	4100	3/3	110	38.0	11.7	21.6
CEDAR RIVER							
City Cabin	21B03	2390	3/2	82	29.0	4.2	13.5
Mt. Gardner	21B21	3300	2/27	87	31.8	1.5	15.6
Mt. Lindsay	21B16	2500	2/28	65	22.6	6.8	12.8
Mt. Washington New	21B52	3000	2/28	53	16.4	0.0	-
Rex River	21B17	2400	2/26	80	28.6	6.0	8.9
S. F. Cedar	21B06	3000	3/2	95	32.6	5.3	17.3
Tinkham Creek	21B20	3400	2/27	121	41.8	6.7	20.0

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS-PORTLAND, OREGON 1973.

SNOW DATA TO MARCH 1, 1974 - APPENDIX 9

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	2/27	171	60.5	15.9	--
Lake Elizabeth	21B19	2900	2/27	172	65.7	12.8	36.4
Olallie Meadows	21B02	3625	3/7	214	81.1	15.0	40.6
S. F. Tolt	21B18	1900	3/1	7	2.4	0.0	2.7
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	2/27	172	65.7	12.8	36.4
Stevens Pass	21B01	4070	2/14	163	63.7	29.6	42.5
			2/27	185	73.5	29.6	45.7
Stevens Pass S. Shed	21B45	3700	2/14	136	52.3	18.0	--
			2/27	147	57.0	18.3	--
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	3/7	62	21.0	8.0	13.0
Beaver Pass	21A01	3680	3/7	135	44.6	16.7	28.3
Brown Top	21A28a	6000	3/6	222	90.6	43.2	--
Cloudy Pass	20A22a	6500	Not Measured			30.0	37.4
Devils Park	20A04	5900	3/3	154	61.5	30.5	39.4
Freezeout Cr. Trail	20A01	3500	Late Report			8.6	11.8
Freezeout Meadows New	20A38	5000	3/7	179	73.3	19.9	25.7
Granite Creek	21A29	3500	3/3	77	24.8	11.6	--
Harts Pass	20A05A	6500	3/3	163	64.4	29.3	38.5
Hozomeen Lake	21A02	2600	Not Measured			4.2	8.6
Klesilkwa	35B-Can	3700	3/1	71	20.7	5.6	13.0*
Lyman Lake +	20A23A	5900	Marker Down			44.0	52.5
Meadow Cabins	20A08	1900	3/3	23	6.0	2.5	6.8
New Hozomeen Lake	21A30	2800	3/7	67	20.2	7.0	--
New Tashme	26A-Can	2500	2/28	48	15.8	4.6	11.2*
Quartette Lake	34-Can	4000	2/26	51	17.3	6.6	--
Rainy Pass	20A09	4780	3/3	144	51.4	27.4	36.0
Thunder Basin	20A07	4200	3/3	93	30.7	13.4	19.8
BAKER RIVER							
Panorama New	21A26	4300	2/12	211	101.3	--	--
			2/29	229	109.9	48.7	--

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

SNOW DATA TO MARCH 1, 1974 - APPENDIX 10

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	2/27	183	69.5	30.4	42.9
Canyon +	21A20a	5100	2/27	221	84.0	50.3	48.3
Glacier Creek	21A23	3700	2/28	117	36.8	9.8	21.6
Panorama New	21A26	4300	2/12	211	101.3	44.7	--
			2/26	229	109.9	48.7	--
Twin Lakes +	21A21a	5200	2/27	243	92.3	56.9	62.3
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	3/3	154	54.4	22.5	--
ELWHA RIVER							
Hurricane	23B03	4500	2/23	92	30.2	12.1	20.0
SKOKOMISH RIVER							
Black & White	23B07	4200	3/6	160	55.2	26.1	33.5
Black & White Lakes	23B06	4700	3/6	205	78.0	41.4	49.9
Four Streams	23B10	3000	3/6	134	53.4	12.9	27.0
Home Sweet Home	23B05	5200	3/6	232	88.0	46.7	64.5

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
APR. 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

U. S. PHOTO A-72-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG. 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WASHINGTON, D C

Released by

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SPOKANE, WASHINGTON

In Cooperation with

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DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

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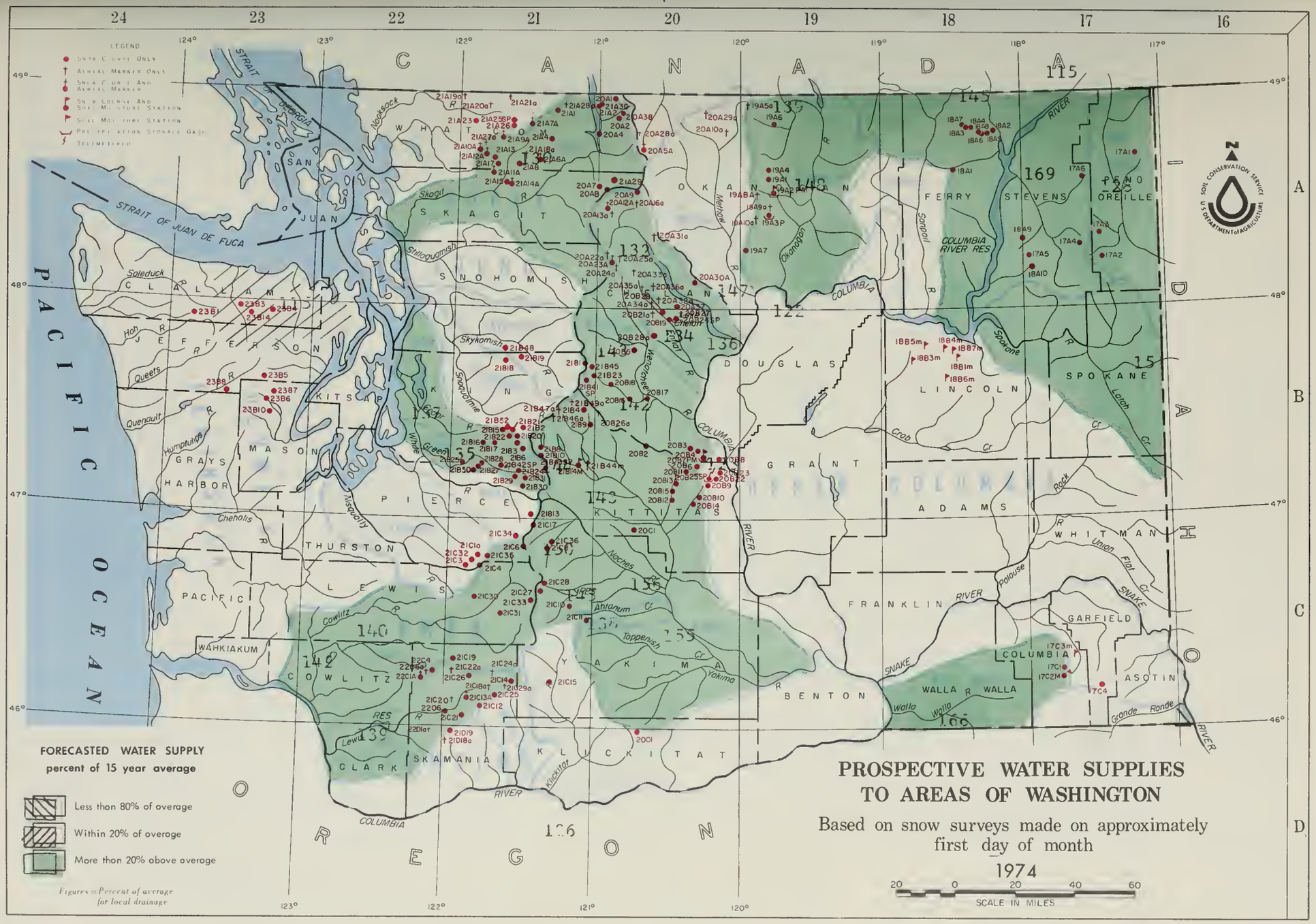
PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1974
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
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Aerial Marker Only
Snow Course and Aerial Marker
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Soil Moisture Station
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20ASA	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakimo River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C2B	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Oivide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	2B	8N	9E	3500
Lone Pine Shelter	21C26	B	9N	7E	3800
Marble Mountain	22C5a	24	BN	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Dldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	BN	7E	3400
Surprise Lakes	21C13A	14	7N	BE	42SD
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	2B	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	32S0

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	BE	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	BE	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	1B	19N	11E	4100
Cedor River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3S00
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Oevils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5D00
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Oock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	3BN	BE	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	1B	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

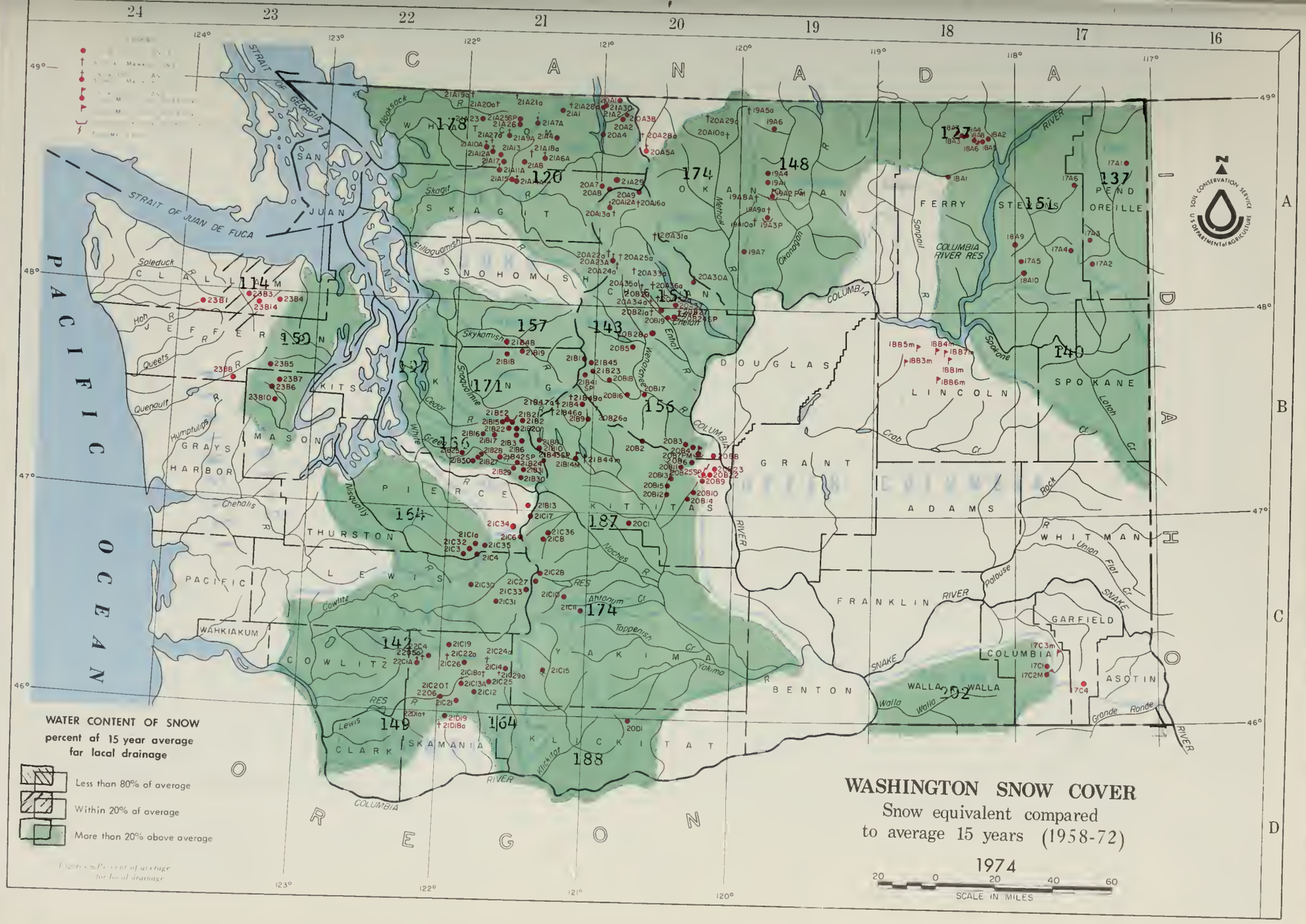
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Oeer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	390D

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1974
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
OKANOGAN
FERRY
STEVENS
PEND OREILLE
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
KITTITAS
DOUGLAS
LINCOLN
SPOKANE
GRANT
ADAMS
WHITMAN
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
YAKIMA
FRANKLIN
GARFIELD
COLUMBIA
BENTON
WALLA WALLA
ASOTIN
CLARK
SKAMANIA
KLICKITAT
COLUMBIA RIVER RES
SNAKE RIVER
COLUMBIA RIVER

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	S	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Berne-Mill Creek	21B23	7	26N	15E	2025
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	2082	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	2085	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700

Wenatchee River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	2084	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Jump-Off	208B	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	2087PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	1883m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	1887m	24	27N	33E	2440
Wheatridge	1886m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	2184	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21BB	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	3N	12E	3000

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	2186	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	2182	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Park	2384	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23814	29	28N	6W	

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	2383	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Black and White	2387	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900

Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow

WATER SUPPLY OUTLOOK

State of Washington
April 1, 1974

** **
** **
** As we reported last month, a serious situation could develop in **
** the watersheds of the state of Washington. Above normal precipi- **
** tation has occurred during the past month, both at lower eleva- **
** tions in the form of rain and in the higher elevations in the **
** form of snow. The potential for high water is more than there. **
** High water will occur, but to the extent of the stage of the **
** rivers and how far above flood stage they will go is strictly a **
** function of the temperatures and precipitation in the upcoming **
** months. We are going to have damaging flows on most of the **
** streams in the state of Washington. Whether these streams exceed **
** flood stage, as I said before, is relative to the weather. If we **
** receive warm temperatures during the latter part of April and **
** throughout May and the precipitation continues to be above nor- **
** mal, high damage will occur, but the probabilities of both of **
** these situations occurring are not too great. There is no ques- **
** tion that an adequate water supply will be experienced in each **
** and every watershed in the state. There is no question that all **
** areas will have abundant water, the only question now is how **
** much. As this report is being written, not all data is available. **
** There have been storms during the last week in March and the **
** first week in April that have prevented snow survey crews from **
** completing their jobs in Cowlitz, Skagit and Baker River **
** Watersheds. Data from these areas is vital to the proper opera- **
** tion of reservoirs and the forecasting of water supplying. **
** Estimates have been made, based on previous months readings, for **
** this missing data and if conditions remain as they have for much **
** longer, these estimates will be well below that which is **
** evidently being measured. All forecasts made on April 1 have **
** been increased as high as 20% from those which were made last **
** month. The snow pack currently runs from a low of 14% above **
** normal on the northern slopes of the Olympic Peninsula to a high **
** of 102% above normal for the Mill Creek Drainage in southeastern **
** Washington. River flows during the month varied from a high of **
** 74% above normal to a low of 15% below. Precipitation during **
** March was all above normal with the exception of the southeastern **
** portion of the state. Precipitation records generally are **
** obtained in the lower elevation valley portions by the National **
** Weather Service in comparison to snow course records which are **
** obtained at the higher portions of the watersheds. The reservoirs **
** range both above and below normal for this time of year, but have **
** little meaning to the total water supply picture. All reservoirs **
** will fill and those that have great amounts of water are in the **
** process of being lowered to control the expected high water of **
** the spring runoff. **
** **
** **

SNOW COVER

When comparing this years snow packs to that which was measured in 1972, we find a great discrepancy. The snow cover in 1972 was general. It was high at the high elevations and high at the low elevations. This year, any of the snow packs that normally we would expect in the lower elevation zones were washed out by the heavy, warm rains that occurred in November and December. This has left a deficiency in the lower elevations, but at the higher elevations this precipitation occurred as snow and is still being measured by the field crews. In the Upper Columbia Basin, the snow pack ranges from 27% above normal on the Kettle River, both in British Columbia and Washington, to a high of 87% above in the Yakima Drainage. Along the Lower Columbia, the snow pack ranges from a low of 42% above normal on the Cowlitz River to 102% above in the Mill Creek Drainage. The Puget Sound Drainage, in general, ranges from 20% above normal in the Skagit to 97% above in the Cedar. The three snow courses measured in the Skagit Drainage are all at low elevations. This is one of the areas where a good amount of missing data is occurring. This number, therefore, is somewhat misleading. On the Olympic Peninsula, the northern portion of the area has a snow cover that is only 14% above normal, but the Skokomish Drainage, southeast of Mount Olympus, has a snow cover that is 50% above normal.

RESERVOIRS

Franklin D. Roosevelt Lake reached its lowest elevation around the first of April. The amount of water in the reservoir is so small that the minus factor in useable capacity is larger than the normal figure on the plus range, i.e., -1,878,000 compared to +1,822,000. It is unknown to this office how long the reservoir will be maintained at this low elevation, but there is no question that there will be plenty of water coming down the Columbia in subsequent months to more than fill the evacuated pool. Some of the other reservoirs in the state have less than normal amounts of water in storage and some have more, but management, in all cases, will be releasing water from these reservoirs to help alleviate the expected damage from the high spring runoff. Even the single purpose irrigation reservoirs operated by the Bureau of Reclamation for the irrigation desires in the Yakima Valley will be operated as flood control reservoirs until all assurance that the major high water is past.

PRECIPITATION

The well above normal rainfall which occurred in November and December is still the massive influence relating to the total winter precipitation reported by the National Weather Service. This winter precipitation ranges from 33% above normal in the central Washington area to 72% above normal in the Pend Oreille-Spokane Drainage Division. March precipitation ranges from 11% below normal in the Southeastern Drainage Division to a high of 46% above normal in the Pend Oreille-Spokane Division.

SOIL MOISTURE

Again, there has been very little change in the total soil moisture picture throughout the state. Where the stations are at the lower elevations, the soil mantle is getting wetter from a combination of snow melt and rainfall on the snow, but at the higher elevations, everything is still dormant and the soil mantle is remaining essentially the same as it has during the past several months.

STREAMFLOW

During the month of March, the Okanogan River, as measured at Tonasket, had the highest measured flow, but this, as previously explained, was the result of the evacuation of Okanogan Lake in anticipation of high inflows in that area. The Wenatchee River, as measured at Peshastin, had the lowest flow during the month, 15% below normal. Most of the other stations reported above normal runoff, but this is generally a result of the above normal valley precipitation which fell on bare ground and immediately ran off. The forecasts of streamflow have all been increased from 5% to 25% as a result of the above normal snowfall and precipitation in the several watersheds. The forecasts now range from 15% above normal for the Columbia River at Birchbank to a high of 55% above normal for the Yakima River, as measured near Parker. Numerical forecasts can be found immediately following this narrative statement.

STREAMFLOW FORECASTS - APRIL 1974

e following summarized runoff forecasts are based principally on mountain snow-
ver and on the assumption that precipitation and temperature will be near average
om the present time to the end of the forecast period. Appreciable deviations
om normal of temperature and/or precipitation will correspondingly modify these
recasts. Streamflow figures for 1973 are preliminary and subject to revision.

sin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-Cast period	1973	1972	1971	15-Yr Average 58-72
		COLUMBIA BASIN					
lumbia River System							
lumbia River	53200	115	Apr-Sep	34814	52590	48592	46430
at Birchbank 1/	43000	115	Apr-Jul	27879	42700	39462	37548
	32700	119	Apr-Jun	20258	31000	29759	27549
lumbia River	84300	122	Apr-Sep	45834	83880	75360	68868
at Grand Coulee 1/	72600	124	Apr-Jul	38140	71820	64444	58379
	58000	126	Apr-Jun	29814	56200	51550	46060
lumbia River	93000	123	Apr-Sep	49262	98040	84965	75337
bl Rock Island Dam 1/	79000	123	Apr-Jul	41312	84520	73096	64192
	63200	125	Apr-Jun	32102	66100	58235	50604
lumbia River	132000	126	Apr-Sep	65012	134620	123427	104670
at The Dalles, Or 1/	114000	127	Apr-Jul	54150	117810	107702	89893
	95000	130	Apr-Jun	43211	96290	88936	73158
ND OREILLE RIVER SYSTEM							
nd Oreille River	20500	128	Apr-Sep	7929	20294	19052	15953
bl. Box Canyon 1/	18700	127	Apr-Jul	7338	18724	17763	14688
	16200	127	Apr-Jun	6507	16109	15357	12777
TTLE RIVER SYSTEM							
ttle River	2710	145	Apr-Sep	1106	2289	2240	1873
nr. Laurier	2580	144	Apr-Jul	1079	2205	2177	1793
	2400	146	Apr-Jun	1010	1965	1927	1640

Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

in, Stream and tation	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
			Seasonal Streamflow in Thousands of Acre-feet				
tle River System (Cont.)							
ville River	250	169	Apr-Sep	54	114	170	148
t Kettle Falls	240	175	Apr-Jul	50	103	158	137
	215	168	Apr-Jun	48	94	146	128
kane River System*							
kane River	4500	151	Apr-Sep	1121	4000	3941	2983
t Post Falls ID 2/	4400	152	Apr-Jul	1074	3874	3798	2899
	4200	151	Apr-Jun	1011	3644	3523	2773
nogan River System							
ilkameen River	2100	139	Apr-Sep	719	3162	1931	1517
r. Nighthawk	1960	138	Apr-Jul	675	2998	1840	1424
	1710	140	Apr-Jun	600	2505	1576	1222
nogan River	2550	148	Apr-Sep	765	3852	2225	1723
r. Tonasket	2310	146	Apr-Jul	707	3523	2077	1582
	1980	147	Apr-Jun	622	2895	1772	1349
how River System							
how River	1520	147	Apr-Sep	512	1959	1339	1031
r. Pateros	1420	147	Apr-Jul	476	1819	1259	963
	1230	148	Apr-Jun	417	1524	1061	832
lan River System							
lan River	1700	136	Apr-Sep	777	1865	1550	1253
t Chelan 3/	1530	138	Apr-Jul	680	1619	1352	1112
	1220	138	Apr-Jun	544	1250	1019	881
hekin River	1200	132	Apr-Sep	541	1235	1093	904
t Stehekin	1030	133	Apr-Jul	447	1044	927	776
	800	133	Apr-Jun	352	772	657	600
iat	320	134	Apr-Sep	-	398	310	239
r. Ardenvoir	295	134	Apr-Jul	-	361	280	220
	240	133	Apr-Jun	-	283	209	180

Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho

Observed flow corrected for storage in Coeur d'Alene Lake and diversion by Rathdrum Prairie Canal.

Observed flow corrected for storage in Lake Chelan.

in, Stream and tation	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
atchee River System							
atchee River	1880	143	Apr-Sep	790	1926	1637	1312
t Plain	1700	143	Apr-Jul	709	1686	1448	1187
	1390	145	Apr-Jun	589	1272	1045	956
atchee River	2540	142	Apr-Sep	1033	2787	2241	1786
t Peshastin	2330	143	Apr-Jul	938	2464	1999	1629
	1850	140	Apr-Jun	786	1883	1454	1324
milt Basin	148 *	107	May-Sep	-	145*	148*	138*
r. Wenatchee							
ima River System							
ima River	204	144	Apr-Sep	85	213	192	142
r. Martin 4/	190	145	Apr-Jul	78	192	179	131
	164	141	Apr-Jun	72	160	139	116
ima River	1380	143	Apr-Sep	555	1515	1305	965
t Cle Elum 5/	1280	146	Apr-Jul	489	1374	1178	877
	1120	146	Apr-Jun	433	1156	936	764
ima River	2680	155	Apr-Sep	582	3231	2401	1730
r. Parker 6/	2650	156	Apr-Jul	590	3071	3627	1701
	2400	152	Apr-Jun	598	2694	1961	1580
hess River	185	148	Apr-Sep	67	196	172	125
r. Easton 7/	175	148	Apr-Jul	63	182	163	118
	155	146	Apr-Jun	59	153	130	106
Elum River	680	143	Apr-Sep	280	750	627	477
r. Roslyn 8/	630	144	Apr-Jul	254	673	568	437
	540	145	Apr-Jun	220	538	433	372

Thousands of Miners' inches.
Observed flow corrected for storage in Lake Keechelus.
Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
Observed flow corrected for storage in Lake Kachess.
Observed flow corrected for storage in Lake Cle Elum.

in, Stream and tation	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
ima River System (Cont.)							
ping River	220	150	Apr-Sep	74	234	193	146
r. Nile 9/	200	150	Apr-Jul	68	209	174	134
	160	143	Apr-Jun	61	156	124	112
rican River	190	148	Apr-Sep	70	186	172	128
r. Nile	175	148	Apr-Jul	65	169	154	118
	150	150	Apr-Jun	58	137	113	100
ton River	360	145	Apr-Sep	161	396	326	247
t Tieton Dam 10/	315	149	Apr-Jul	128	338	272	211
	255	148	Apr-Jun	102	261	198	172
hes River	1340	151	Apr-Sep	442	1477	1168	889
r. Naches 11/	1240	153	Apr-Jul	385	1339	1055	810
	1060	152	Apr-Jun	336	1107	833	698
anum Creek	66	138	Apr-Sep	21	75	63	48
r. Tampico 12/	63	143	Apr-Jul	18	69	57	44
	54	138	Apr-Jun	16	59	48	39
er Columbia River System							
l Creek							
r. Walla Walla	45	166	Apr-Sep	17	34	30	27
	40	166	Apr-Jul	13	29	26	24
	35	166	Apr-Jun	11	26	24	21
is River	1870	139	Apr-Sep	773	1597	1827	1342
t Ariel 13/	1700	145	Apr-Jul	642	1392	1605	1174
	1500	143	Apr-Jun	556	1236	1341	1052
litz River	2950	140	Apr-Sep	-	3048	2800	2106
lw. Mayfield Dam	2650	143	Apr-Jul	-	2672	2463	1846
	2200	139	Apr-Jun	-	2201	1935	1478

Observed flow corrected for storage in Bumping Lake.
Observed flow corrected for storage in Rimrock Lake.
Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
Observed flow of North and South Forks (combined)
Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.

sin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr Average 58-72
ower Columbia River System (Cont.)							
owlitz River							
at Castle Rock 14/	3930	142	Apr-Sep	1561	3819	3710	2768
	3550	147	Apr-Jul	1344	3331	3253	2416
	2950	142	Apr-Jun	1168	2782	2585	2083
OLYMPIC PENINSULA							
ngeness River System							
ngeness River	190	115	Apr-Sep	-	207	196	165
nr. Sequim	155	113	Apr-Jul	-	171	154	137
	120	115	Apr-Jun	-	127	105	104
PUGET SOUND							
agit River System							
agit River at Newhalem 15/	2940	130	Apr-Aug	-	3402	2775	2260
dar River System							
dar River Cedar Falls	125	137	Apr-Sep	-	122	120	91
een River System							
een River Blw. Howard Hanson Dam	420	135	Apr-Sep	165	434	393	312

/ Observed flow corrected for storage in Mayfield Reservoir.

/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about April 1, 1974 as percent of the same date in 1973 and 1972 and average of record

Tributary Basin	No. of Courses Average	1974 Snow Water Expressed as percent of 1973	1972	1958-72 Avg.
		UPPER COLUMBIA BASIN		
Pend Oreille	17	212	124	137
Kettle	16	262	164	127
Colville	3	290	248	151
Spokane	16	311	110	140
Okanogan	37	184	103	148
Methow	8	228	123	174
Chelan	7	215	89	150
Entiat	10	233	99	143
Wenatchee	10	377	92	156
Yakima	20	306	106	187
Ahtanum	2	113	171	174
		LOWER COLUMBIA		
Mill Creek	3	507	164	202
Klickitat	1	-	195	188
White Salmon	2	363	116	164
Lewis	16	462	125	149
Cowlitz	4	272	91	142
		PUGET SOUND		
Nisqually	4	242	90	164
Green	8	392	106	136
Cedar	6	722	122	197
Snoqualmie	2	368	123	171
Skykomish	3	311	105	157
Skagit	3	485	62	120
Nooksack	5	208	110	178
		OLYMPIC PENINSULA		
Skokomish	4	216	134	150
Elwha	1	223	123	114

RESERVOIR STORAGE - 1000 Acre Feet

ASIN OR TREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (April) 1974	1973	1972	Normal*
		COLUMBIA				
ookane	Coeur d'Alene Lake	225.1	263.5	83.9	335.2	174.1
olumbia	Franklin D. Roosevelt Lake	5232.0	-1878.4	1546.3	1242.4	1821.8
olumbia	Banks Lake	761.8	690.8	592.0	680.2	581.4
anogan	Conconully Reservoir	13.0	7.2	11.8	10.8	11.8
anogan	Salmon Lake	10.5	7.4	9.5	8.6	7.5
helan	Lake Chelan	676.1	157.0	121.4	199.5	179.3
		YAKIMA				
akima	Keechelus Lake	157.8	114.4	112.1	127.5	107.8
achess	Kachess Lake	239.0	122.1	196.8	215.3	190.2
le Elum	Lake Cle Elum	436.9	225.0	340.5	326.9	283.2
umping	Bumping Lake	33.7	5.8	11.7	9.1	11.4
ieton	Rimrock Lake	198.0	151.2	160.8	145.1	141.7
		PUGET SOUND				
agit	Ross Reservoir	1202.0	785.7	734.2	833.0	386.1
agit	Diablo Reservoir	90.6	83.8	87.5	87.8	85.5
agit	Gorge Reservoir	9.8	8.2	8.4	7.8	-

/ Based on Active Storage

15-year Average 1958-1972

SOIL MOISTURE - APRIL

rainage Basin nd tation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of April 1 1974	1973	1972
KANOGAN							
almon Meadows	19A2M	4500	48	5.4	3.7	3.0	3.7
rout Creek	3-M	3600	48	7.3	4.2	3.7	5.6
AKIMA							
omery Flat	21B20m	2200	48	6.9	4.9	6.1	-
ake Cle Elum	21B14M	2200	48	12.8	9.1	9.2	-
ALLA WALLA							
ouse	17C3m	3650	48	11.1	10.2	9.4	10.5
elmers	17C2M	4400	48	12.0	10.0	8.3	10.6
ENATCHEE							
pper Wheeler	20B7M	4400	48	12.7	12.3	11.4	12.4

FALL SOIL MOISTURE

rainage Basin nd tation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1973	1972	1971
KANOGAN							
almon Meadows	19A02M	4500	48	5.4	2.6	2.8	2.7
rout Creek	3-M	3600	48	7.3	2.8	3.3	3.3
AKIMA							
omery Flat	21B20m	2200	48	6.9	2.6	4.1	2.1
ake Cle Elum	21B14M	2200	48	12.8	6.1	8.7	7.1
ALLA WALLA							
ouse	17C3m	3650	48	11.1	5.6	6.0	6.2
elmers	17C2M	4400	48	12.0	7.6	7.7	8.2
ENATCHEE							
pper Wheeler	20B7M	4400	48	12.7	6.0	5.7	6.5

PRECIPITATION 1/

Division Averages and Departures

rainage ivisions	FALL Sept-Oct Observed	1973 2/ Departure	WINTER Nov. 1973 - Mar. 1974 2/ Observed	Departure
olumbia in Canada	5.14	+ 0.67	15.91	+ 3.16
end Oreille - Spokane	4.28	- 0.20	32.17	+13.42
ortheastern Washington	3.36	- 0.58	17.93	+ 6.82
outheastern Washington	3.71	+ 0.48	20.99	+ 7.52
entral Washington	4.68	- 0.07	36.60	+ 9.07
orth Central Washington	3.44	+ 1.82	9.48	+ 2.76
orthwest Slope Cascades	11.53	- 1.16	71.63	+19.40
outhwest Slope Cascades	9.69	+ 1.01	57.29	+15.65

ortheastern Washington - Lower Spokane, Colville, Sanpoil and Lower Kettle Drainages.

outheastern Washington - Touchet, Tucannon and Palouse Drainages.

entral Washington - Yakima, Wenatchee and Chelan Drainages.

orth Central Washington - Methow and Okanogan Drainages.

orthwest Slope Cascades - Puget Sound Drainages.

outhwest Slope Cascades - Lower Columbia Drainages.

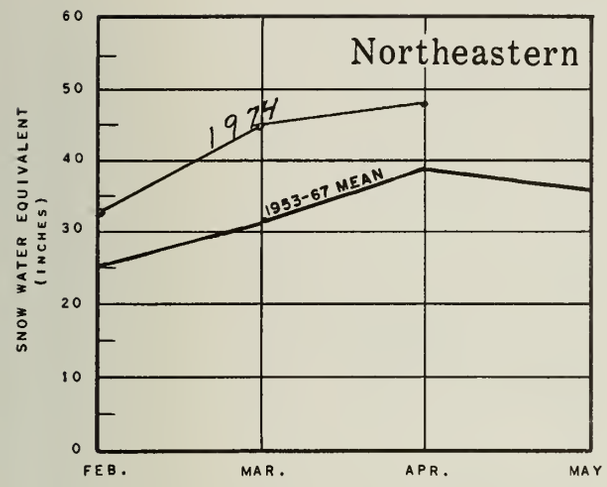
/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

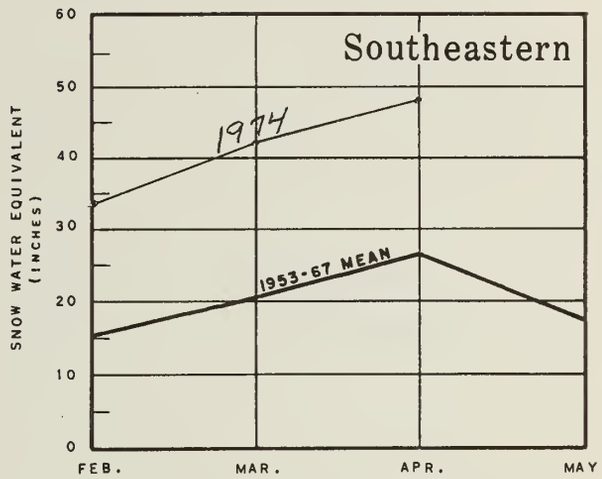
/ - Departure from 15-year (1958-72) drainage division average.

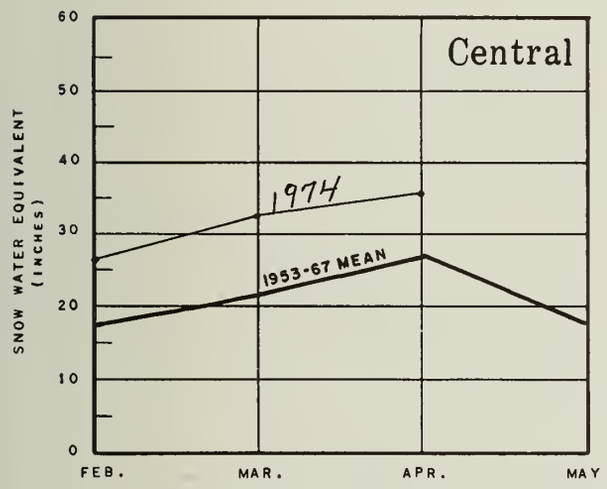
WASHINGTON SNOW COVER

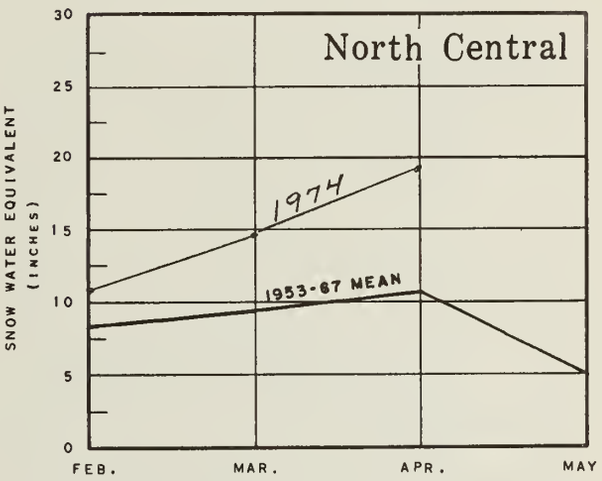
1974

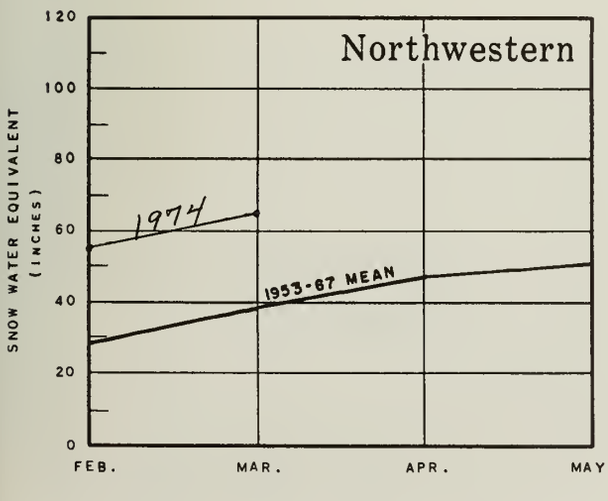
DRAINAGE AREAS

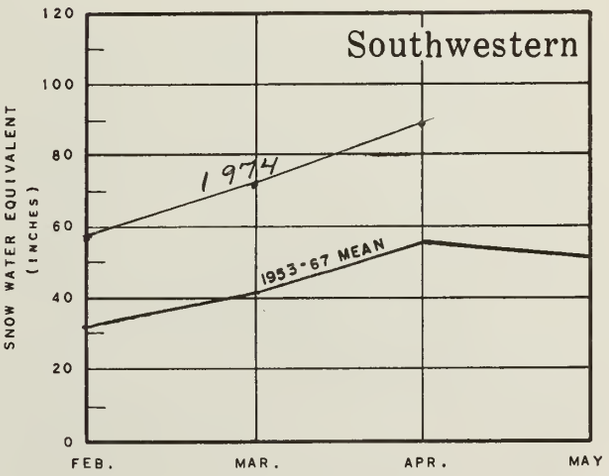










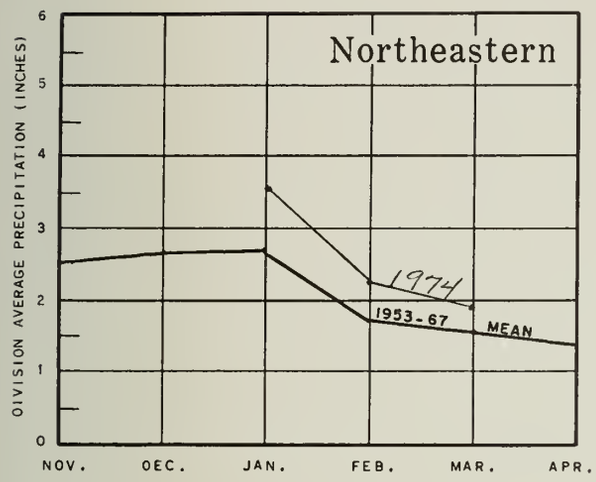


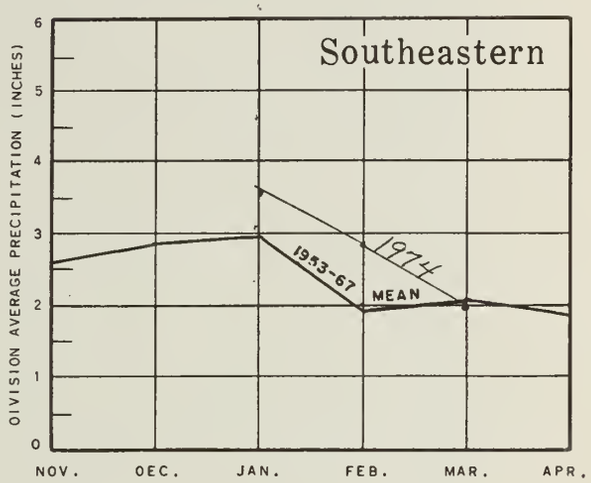
Selected Snow Survey Courses by Soil Conservation Service

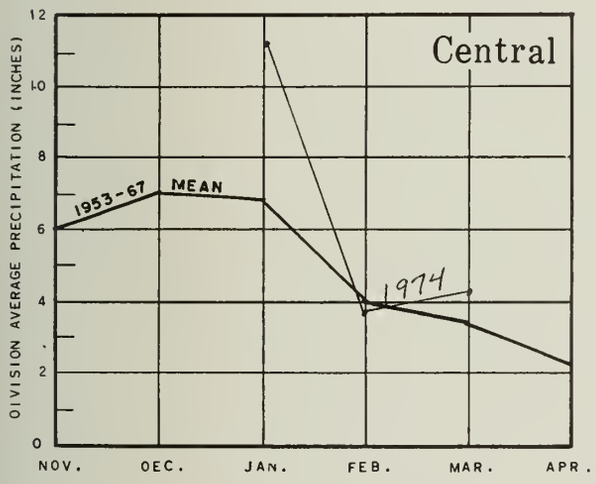
WASHINGTON VALLEY PRECIPITATION

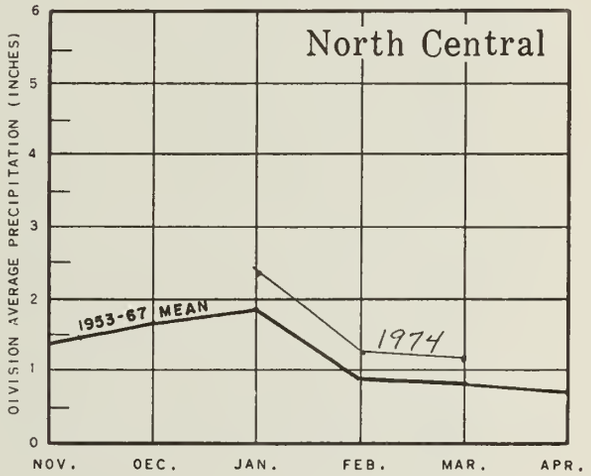
1974

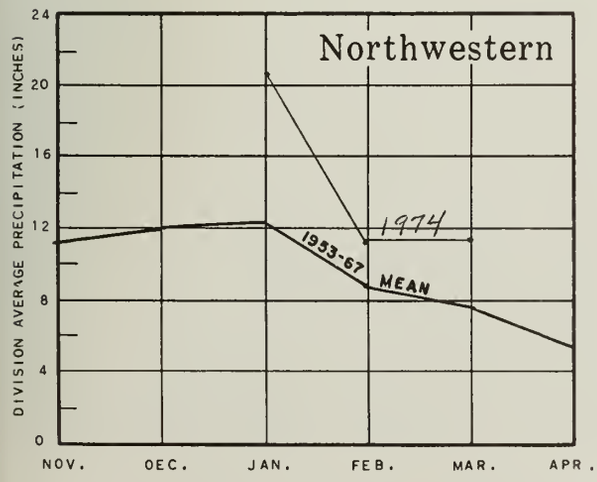
DRAINAGE AREAS

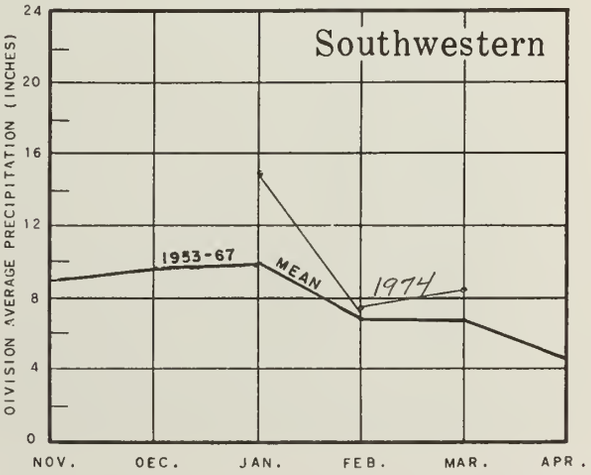












Preliminary Analysis by National Weather Service

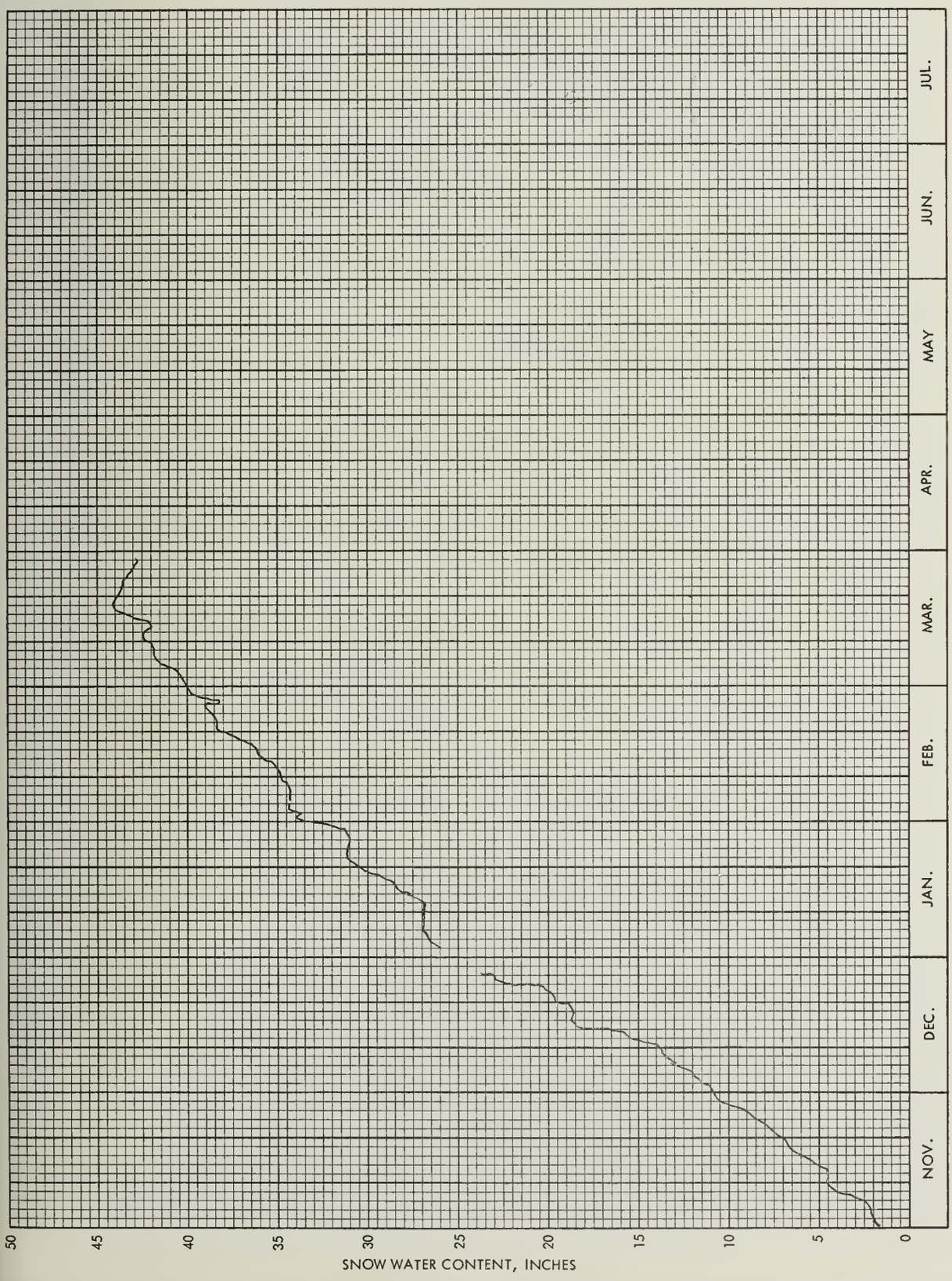
BERNE-MILL CREEK

SNOW PILLOW DATA

AS OF APRIL 1, 1974

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 43' Long. 121° 42' Elev. 3240



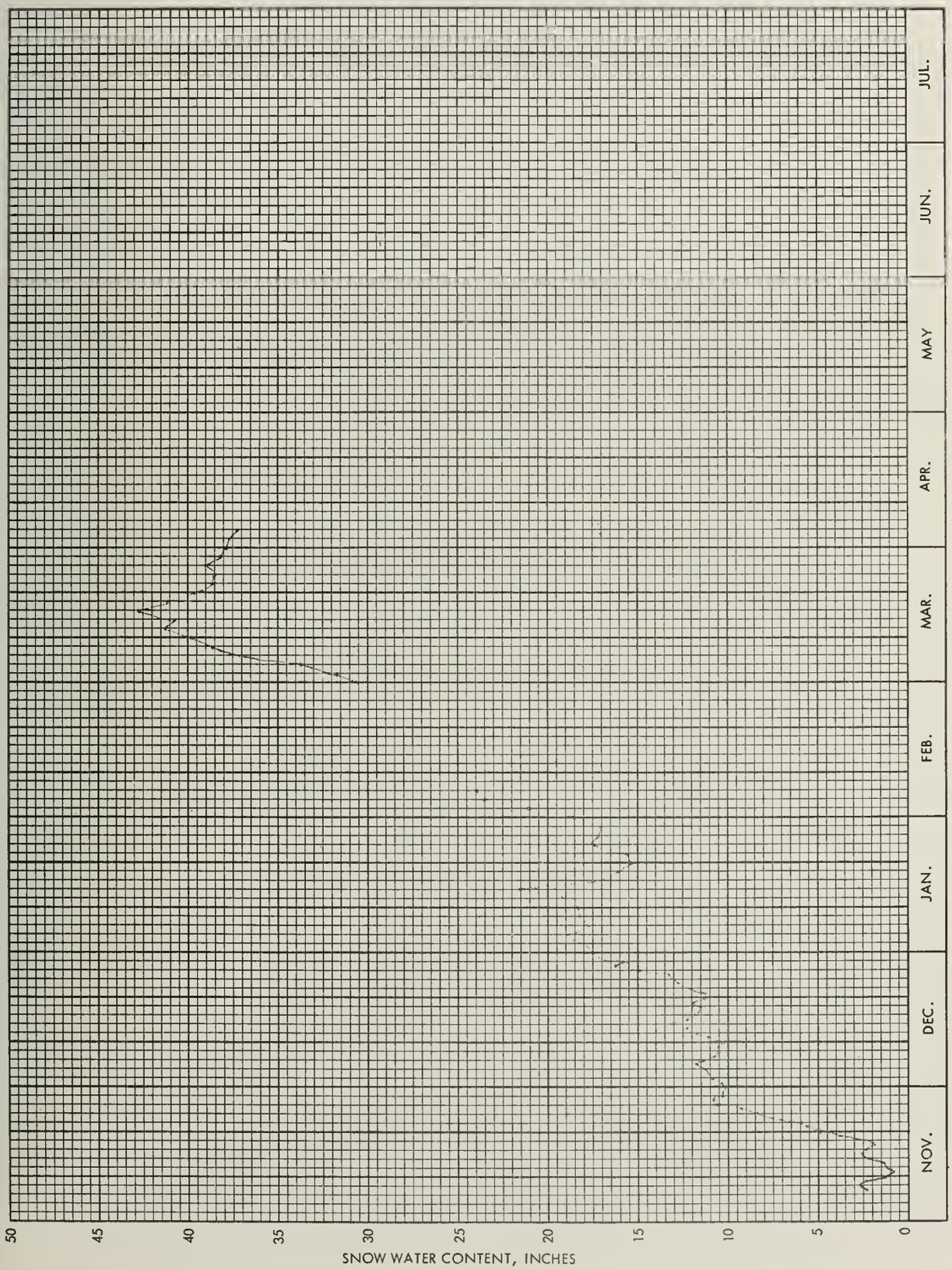
COUGAR MOUNTAIN - PS

SNOW PILLOW DATA

AS OF APRIL 1, 1971

Sec. 21 T. 21N R. 9E No. 21D42SP Drainage: Green River

Lat. 47° 17' Long. 120° 40' Elev. 3200'

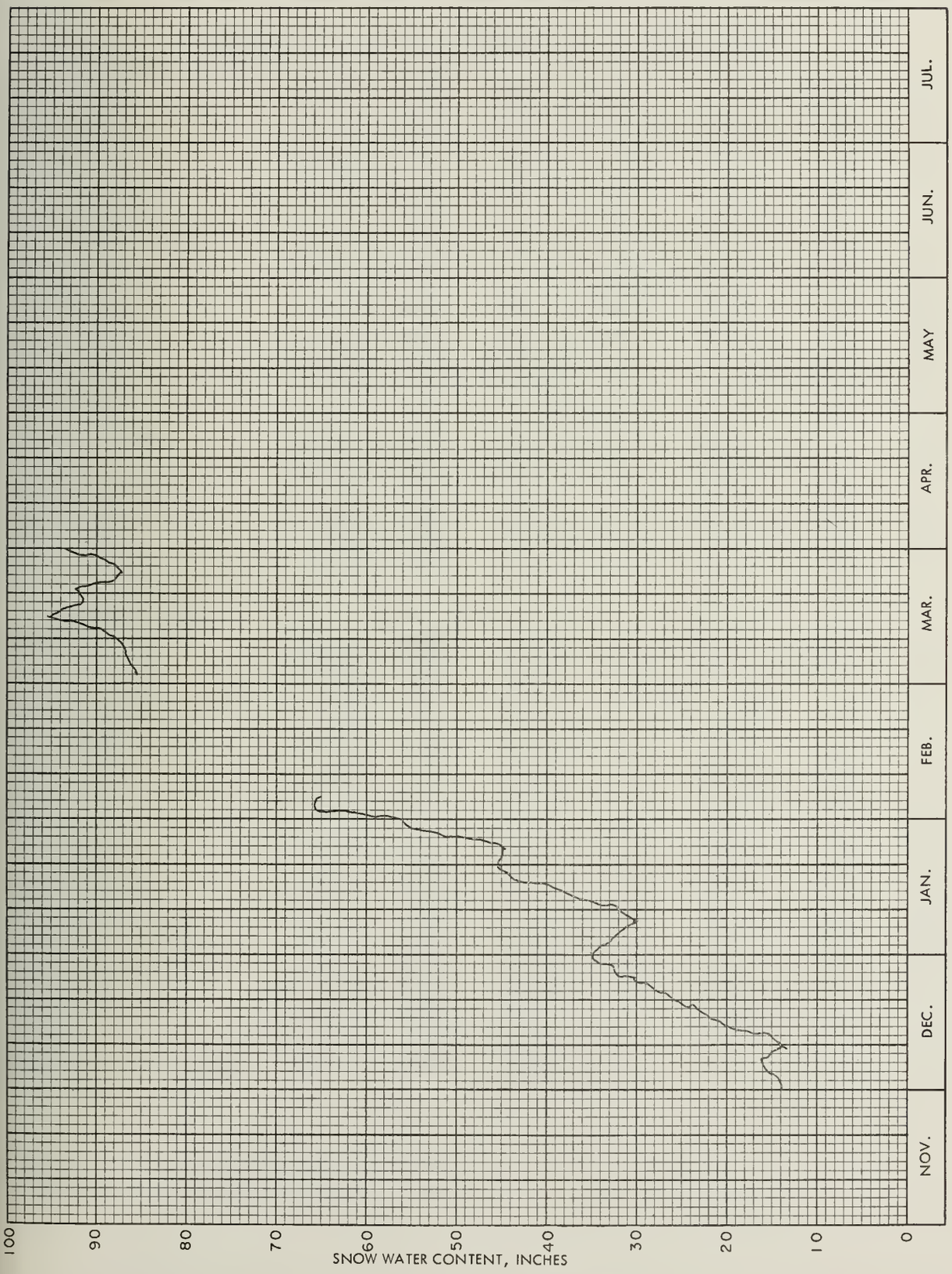


SNOW PILLOW DATA

AS OF APRIL 1, 1974

Sec. 17 T. 39N R. 9E No. 21A25SP Drainage: Nooksack River

Lat. 48° 52' Lang. 121° 40' Elev. 4300'



M7-0-22028-C2-L

WSFB-X4-L

SNOW DATA TO APRIL 1, 1974 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	4/2	180	75.0	31.1	49.4
Baree Midway	15B16	4600	4/1	131	54.1	24.4	37.7
Baree Trail	15B15	3800	4/2	40	15.4	0.0	9.6
Benton Meadow	16A02	2344	3/27	8	2.4	0.0	3.4
Benton Spring	16A03	4900	4/2	85	32.1	14.4	19.4
Boyer Mountain	17A02	5250	3/29	101	41.6	22.4	27.9
Brush Creek Timber	14A13	5000	3/27	39	13.0	8.1	-
Bunchgrass Meadow	17A01	5000	3/29	110	46.2	28.0	31.4
Chewelah	17A04	4923	4/1	Plowed Out		13.2	18.5
Heart Lake Trail	14C10	4800	3/27	81	33.0	9.2	23.4
Hoodoo Basin	15C10	6000	3/27	164	73.6	35.4	53.8
Hoodoo Creek	15C01	5900	3/27	154	67.7	33.4	50.3
Lookout	15B02	5250	3/14	140	48.2	20.0	35.6
			3/27	122	47.1	20.8	38.7
Mosquito Ridge	16A04A	5100	3/25	134	57.6	28.0	40.3
Nelson	19-Can	3050	3/29	63	20.8	12.4	15.7*
Schweitzer Bowl	16A06	4500	3/27	108	45.3	21.8	31.7
Schweitzer Ridge	16A05	6100	3/27	148	66.0	35.5	48.3
Smith Creek	16A01	4800	3/29	170	70.5	36.9	48.5
Winchester Creek	17A03	2970	3/29	42	13.2	5.6	11.8
KETTLE RIVER							
Barnes Creek	90-Can	5300	3/29	67	23.6	16.7	21.2*
Big White Mtn.	154-Can	5500	3/31	76	30.0	18.4	19.8*
Bluejoint Mtn.	244-Can	7500	4/1	Not Measured		-	New
Boulder Road	18A02	1450	3/29	4	1.6	0.0	2.6
Butte Creek	18A03	4070	3/29	42	14.3	7.0	10.1
Cabin Creek	18A08	3170	3/29	33	10.8	5.0	9.2
Carmi	126-Can	4100	3/31	28	8.6	5.6	6.3*
Farron # 1	17-Can	4000	3/27	53	18.8	12.7	13.4*
Farron # 2	243-Can	4000	3/27	53	18.9	11.5	New
Goat Creek	18A04	3595	3/29	27	8.9	2.8	6.0
Graystoke Lake	5-Can	5950	3/27	71	28.5	18.6	23.1*
Monashee Pass	48A-Can	4500	3/29	44	15.8	11.6	14.1*
Old Glory Mountain	42-Can	7000	3/29	126	48.6	29.5	28.3*
Snow Caps Creek	18A05	2150	3/29	6	1.8	0.0	2.3
Snow Caps Trail	18A06	2720	3/29	19	5.9	0.6	5.7
Summit G. S.	18A07	4600	3/29	33	10.4	6.8	8.6
Trapping Creek Lower	166-Can	3050	3/31	19	5.4	0.8	3.3*
Trapping Creek Upper	165-Can	4450	3/31	39	14.4	9.4	9.5*

Average based on 1958-1972 average
* Average for years of record

USDA SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

SNOW DATA TO APRIL 1, 1974 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average #
COLVILLE RIVER							
Baird	17A06	3215	3/29	26	9.3	2.3	5.7
Carlson	18A09	2885	3/30	0	0.0	0.0	2.6
Chewelah	17A04	4925	4/1	Plowed Out		13.2	18.5
Stranger Mountain	17A05	4990	3/30	58	22.6	11.0	14.6
Togo	18A10	3370	3/30	47	17.0	6.5	12.5
SPOKANE RIVER							
Above Burke	15B08	4100	3/27	83	31.3	10.6	25.6
Above Roland	15B07	4350	3/25	114	50.2	16.5	35.8
Below Roland	15B06	3770	3/25	52	21.8	3.1	17.4
Copper Ridge	16B02	4800	3/26	97	41.6	11.5	30.0
Forty-nine Meadows	15B03	5000	4/4	119	41.8	17.5	34.9
Fourth of July Summit	16B03	3100	3/14	45	14.4	2.6	9.3
			3/25	37	14.2	0.0	7.8
Granite Peak	15B13A	6000	4/4	174	59.0	31.7	47.5
Kellogg Peak	16B05A	5560	3/25	124	52.9	18.9	34.7
Lookout	15B02	5250	3/14	140	48.2	20.0	35.6
			3/27	122	47.1	20.8	38.7
Lost Lake	15B14A	6000	4/4	282	89.2	36.9	62.1
Lower Sands Creek	16B01	3400	3/26	82	31.2	8.4	20.7
Medicine Ridge	15B04A	6150	4/4	184	60.6	30.2	48.1
Mosquito Ridge	16A04A	5110	3/25	134	57.6	28.0	40.3
Roland Summit	15B05A	5200	3/25	139	59.5	21.5	39.2
Sherwin	16C01	3200	3/26	59	22.7	4.4	13.8
Sunset	15B09A	5600	3/25	126	52.0	20.7	39.3
SANPOIL RIVER							
Sherman Creek Pass	18A01	5350	3/29	69	24.3	12.8	15.5
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	4/1	25	6.8	5.4	6.1*
Blackwall Peak	100-Can	6250	4/1	121	49.3	25.2	35.3*
Bouleau Creek	31-Can	5000	4/1	48	14.8	9.9	12.0*
Bouleau Lake	234-Can	4580	4/1	60	18.3	12.7	16.3*
Brenda Mine	193-Can	4800	3/29	53	19.3	11.8	14.0*
Brookmere	27-Can	3200	3/31	34	11.2	5.2	9.8*
Carrs Landing Upper	168-Can	3200	3/29	12	4.1	0.0	3.2*
Clark +	19A08a	7000	4/2	114	42.2	-	23.3
Enderby	130-Can	6250	3/29	125	50.2	34.6	38.9*
Esperon Creek Lower	164-Can	4400	3/31	51	18.1	10.5	12.9*
Esperon Creek Middle	163-Can	4700	3/31	62	23.9	14.1	15.9*
Esperon Creek Upper	162-Can	5400	3/31	78	31.7	14.6	19.5*

Average based on 1958-72 average
* Average for years of record
+ Snow water equivalent estimated from aerial stadia observation

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SNOW DATA TO APRIL 1, 1974 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
OKANOGAN RIVER (Cont.)							
Freezeout Meadows New	20A38	5000	4/1	Late Report		23.7	-
Graystoke Lake	5-Can	5950	3/27	71	28.5	18.6	23.1
Hamilton Hill	107-Can	4900	3/29	53	16.5	11.4	16.0*
Harts Pass	20A05A	6500	4/1	Late Report		33.3	46.4
Horseshoe Basin +	19A05a	7000	4/2	72	26.6	16.1	13.5
Isintok Lake	152-Can	5510	3/30	40	13.4	6.9	8.1*
Lost Horse Mountain	105-Can	6300	4/1	44	12.6	8.2	9.1*
Loup Loup	19A07	4650	3/29	47	17.3	6.0	9.3
McCulloch	4-Can	4200	3/31	32	9.8	5.7	6.7*
Missezula Mountain	106-Can	5100	3/28	44	11.3	9.0	8.4*
Mission Creek	5A-Can	6000	3/27	80	29.8	17.5	20.0*
Monashee Pass	48A-Can	4500	3/29	44	15.8	11.6	14.1*
Mount Kobau	156-Can	5950	4/1	63	23.7	10.0	13.6*
Muckamuck +	19A09a	6390	4/2	83	30.7	-	17.8
Mutton Creek No. 1	19A01	5700	3/27	72	28.4	11.5	14.2
Mutton Creek No. 2	19A04	6000	3/27	71	26.8	11.9	15.4
Mutton Creek No. 2 SP	19A11SP	6000	3/27	-	22.6	8.6	New
New Copper Mountain	46A-Can	4300	4/1	Late Report		3.8	5.3*
New Penticton Res. # 2	183-Can	5225	3/28	44	13.0	6.9	8.8*
Nickel Plate Mtn.	47-Can	6200	3/30	36	12.3	5.5	7.9*
Oyama Lake	203-Can	4400	3/31	31	9.1	6.1	7.5*
Paysayten +	20A28a	4300	4/2	55	20.4	10.5	16.0
Postill Lake	55-Can	4500	3/29	37	13.7	8.6	8.9*
Quartette Lake	34-Can	4000	3/27	48	12.9	7.9	15.1*
Rusty Creek	19A03	4000	3/26	39	13.4	4.5	7.0
Salmon Meadows	19A02	4500	3/27	53	18.7	7.7	10.3
Silver Star Mountain	99-Can	6050	3/30	108	43.9	26.9	27.7*
Summerland Reservoir	3A-Can	4200	3/31	37	12.6	7.7	9.3*
Touts Coulee	19A06	2845	3/28	9	2.9	0.0	1.1
Trout Creek	3-Can	4700	3/28	36	9.6	6.2	7.5*
Vasseux Creek	233-Can	4600	3/31	32	8.6	4.6	7.7*
White Rocks Mountain	70-Can	6000	3/28	98	40.2	23.6	22.9*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	4/2	139	57.8	28.1	New
Brief	20B19	1600	3/30	0	0.0	-	4.0
Entiat Meadows +	20A33a	4800	4/2	174	72.4	35.1	48.1
Entiat River Trail +	20A34a	3150	4/2	76	28.9	8.6	21.3
Four Mile Ridge +	20B27a	7000	4/2	124	51.6	23.4	-
Fox Camp +	20A36a	6510	4/2	182	75.7	42.9	59.0
Pope Ridge	20B20	4300	3/27	74	28.3	9.3	16.9
Pope Ridge SP	20B24SP	4300					
Pugh Ridge +	20A32a	6400	4/2	141	58.7	27.3	39.6

Average based on 1958-1972 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

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SNOW DATA TO APRIL 1, 1974 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
ENTIAT RIVER (Cont.)							
Shady Pass	20A37	6200	3/28	108	45.1	21.3	-
Snow Brushy +	20A35a	3850	4/2	127	52.8	25.4	40.9
Tommy Creek +	20B21a	5300	4/2	94	39.1	15.6	27.1
METHOW RIVER							
Billy Goat Pass +	20A10a	6409	4/2	120	44.4	-	32.0
Dollar Watch +	20A29a	7000	4/2	108	40.0	23.8	29.3
Harts Pass	20A05A	6500	4/1	Late Report		33.3	46.4
Horseshoe Basin +	19A05a	7000	4/2	72	26.6	16.1	13.5
Loup Loup	19A07	4650	3/29	47	17.3	6.0	9.3
Mutton Creek No. 1	19A01	5700	3/27	72	28.4	11.5	14.2
Mutton Creek No. 2	19A04	6000	3/27	71	26.8	11.9	15.4
Mutton Creek No. 2 SP	19A11SP	6000	3/27	-	22.6	8.6	New
Rusty Creek	19A03	4000	3/26	39	13.4	4.5	7.0
Salmon Meadows	19A02	4500	3/27	53	18.7	7.7	10.3
War Creek Pass +	20A31a	6500	4/2	153	56.6	29.4	43.5
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	3/24	173	77.8	35.0	54.0
Greenwood Flat +	20A25a	3540	3/24	100	44.0	17.1	24.8
Little Meadows +	20A24a	5275	3/24	180	79.2	35.7	45.8
Lyman Lake	20A23A	5900	3/24	204	91.6	43.3	61.5
Park Creek Flat +	20A13a	2220	4/1	Not Measured		-	34.3
Park Creek Ridge	20A12A	4600	3/31	160	61.6	31.6	46.1
Petersons +	20A16a	3730	4/1	Not Measured		-	32.2
Rainy Pass	20A09	4780	4/1	Late Report		30.8	41.6
Safety Harbor	20A30A	6300	3/25	116	44.3	21.5	29.9
War Creek Pass +	20A31a	6500	4/2	153	56.6	29.4	43.5
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	3/28	103	48.0	16.8	27.6
Berne-Mill Creek New SP	21B41SP	3240	3/28	90	42.2	12.8	23.3
Blewett Pass No. 2	20B02	4270	3/27	59	26.0	7.4	16.5
Chiwaukum G. S.	20B16	1810	3/28	45	15.9	0.0	10.5
Fish Lake	21B04	3371	3/27	118	50.6	17.9	35.1
Lake Wenatchee	20B05	1970	3/28	47	18.4	2.1	11.9
Leavenworth R. S.	20B17	1127	3/15	3	1.4	0.0	-
			4/1	0	0.0	0.0	0.7
Lyman Lake	20A23A	5900	3/24	204	91.6	43.3	61.5
Merritt	20B18	2140	3/28	55	22.4	4.1	14.9
Stevens Pass	21B01	4070	3/15	201	83.1	34.0	50.8
			3/28	168	77.0	35.0	53.7
Stevens Pass Sand Shed	21B45	3700	3/15	162	64.8	20.3	-
			3/28	131	60.8	20.8	-

Average based on 1958-1972 average

\+ Snow water equivalent estimated from aerial stadia observation

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WSFB-X4-L

SNOW DATA TO APRIL 1, 1974 - APPENDIX 5

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	3/28	33	15.1	6.2	7.8
Scout-A-Vista	20B04	3400	3/28	33	11.8	4.2	6.9
STEMILT CREEK							
Jump-Off	20B08	4450	3/26	36	12.8	6.0	8.0
Stemilt Slide	20B06	5000	3/26	53	22.3	9.0	15.5
Upper Wheeler	20B07	4400	3/26	30	11.4	5.7	9.0
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	3/27	49	20.3	10.0	-
Colockum Creek Lower	20B23	4300	3/27	38	13.5	5.8	-
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	3/26	22	10.6	0.0	5.2
Big Boulder Creek	21B09	3200	3/27	82	39.0	7.1	18.0
Blewett Pass No. 2	20B02	4270	3/27	59	26.0	7.4	16.5
Bumping Lake	21C08	3450	3/15	81	27.9	7.9	16.9
			4/1	72	28.2	6.6	16.2
Bumping Lake New	21C36	3400	3/15	93	34.6	10.5	21.4
			4/1	84	36.2	8.8	20.7
Cayuse Pass	21C06	5300	4/1	Late Report		54.5	90.2
Colockum Pass	20B09	5370	3/26	65	23.6	11.1	17.4
Cooke Creek	20B10	4123	3/26	30	11.4	0.0	5.1
Corral Pass	21B13	6000	4/1	Late Report		32.5	42.0
Fish Lake	21B04	3371	3/27	118	50.6	17.9	35.1
Green Lake	21C10	6000	4/2	120	52.0	23.0	36.2
Grouse Camp	20B11	5385	3/22	69	25.3	11.0	17.1
High Creek	20B12	2930	3/22	23	8.6	0.0	2.3
Joe Lake	21B46a	4624	3/25	230	98.9	42.4	-
Lake Cle Elum	21B14M	2200	3/14	35	13.0	0.0	7.8
			4/1	20	7.8	0.0	4.5
Lemah Creek +	21B47a	3327	3/25	150	64.5	31.2	-
Manashtash	20C01	3935	3/26	20	7.4	0.0	2.2
Morse Lake	21C17	5400	4/1	Late Report		42.8	61.8
Nanum	20B13	2340	3/22	42	13.9	4.1	8.2
Olallie Meadows	21B02	3625	4/1	Late Report		19.6	48.8
Satus Pass	20D01	4030	3/28	44	16.2	0.0	8.6
Stampede Pass SP	21B10	3860	4/2	162	61.1	27.2	43.4
Trail Creek	20B14	3360	3/26	0	0.0	0.0	0.1
Tunnel Avenue	21B08	2450	3/14	94	36.2	9.2	24.0
			4/1	84	35.8	8.2	24.1
Van Epps Pass +	20B26a	5925	3/25	173	74.4	36.4	-

Average based on 1958-1972 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1974 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
Walters Flat	20B15	3360	3/22	32	10.6	0.0	5.3
Waptus Lake +	21B49a	3024	3/25	139	59.8	24.4	-
White Pass (E. Side)	21C28	4500	3/18	105	39.7	11.1	24.7
			4/2	98	36.9	11.9	25.9
White Pass (L. Lake)	21C27	4500	3/28	104	44.9	14.4	31.1
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	3/26	22	10.6	0.0	5.2
Green Lake	21C10	6000	4/2	120	52.0	23.0	36.2
LOWER COLUMBIA							
ASOTIN CREEK							
Spruce Springs	17C04	5700	3/25	94	39.5	14.2	26.6
MILL CREEK							
Homestead	17C01	4030	3/27	38	16.9	2.4	7.3
Martin Springs	17C02	4400	3/27	62	25.7	5.2	14.2
Tollgate	18D3M	5070	3/27	102	48.4	15.0	25.1
KLICKITAT RIVER							
Satus Pass	20D01	4030	3/28	44	16.2	0.0	8.6
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	4/3	187	82.7	24.7	49.4
Surprise Lakes	21C13A	4250	3/31	199	87.3	22.3	53.9
WIND RIVER							
Old Man Pass	21D19	3100	3/30	73	32.9	4.4	19.7
LEWIS RIVER							
Blue Lake +	21C22a	4800	3/29	300	132.0	50.2	84.8
Bob's Trail	21C21	2200	3/29	55	24.2	0.0	15.1
Calamity Ridge +	22D01a	2500	3/29	12	5.5	0.0	5.6
Council Pass +	21C18a	4200	3/29	144	63.4	23.5	42.9
Cultus Creek	21C12	4000	4/3	187	82.7	24.7	49.4
Divide Meadow +	21C29a	5600	3/29	180	79.2	31.9	60.6
Grand Meadow	21C25	3500	3/31	98	44.1	11.0	27.7
Lone Pine Shelter	21C26	3800	4/1	Late Report		21.4	43.3
Marble Mountain +	22C05a	3200	3/29	140	68.6	13.2	38.2
Mosquito Meadows	21C19	4100	4/1	Late Report		22.6	44.9
New Muddy River	22C06	2000	3/30	7	3.4	0.0	9.5

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973

SNOW DATA TO APRIL 1, 1974 - APPENDIX 7

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
LEWIS RIVER (Cont.)							
Old Man Pass	21D19	3100	3/30	73	32.9	4.4	19.7
Plains of Abraham +	22C01a	4400	3/29	242	108.9	44.4	71.8
Smith Creek Road	22C04	2100	3/30	51	23.9	0.0	17.7
Spencer Meadow +	21C20a	3400	3/29	104	47.8	9.2	25.7
Surprise Lakes	21C13A	4250	3/31	199	87.3	22.3	53.9
Table Mountain +	21C24a	4200	3/29	176	77.4	28.0	48.8
Timbered Peak +	21D18a	3000	3/29	72	33.1	2.5	17.8
COWLITZ RIVER							
Cayuse Pass	21C06	5300	4/1	Late Report		54.5	90.2
Mosquito Meadows	21C19	4100	4/1	Late Report		22.6	44.9
Ohanapecosh	21C32	2200	4/1	Late Report		0.0	15.7
Packwood Lake	21C31	2870	4/1	Late Report		0.0	13.1
Pigtail Peak	21C33	5900	3/28	194	84.0	37.8	64.7
Plains of Abraham +	22C01a	4400	3/29	242	108.9	44.4	71.8
Potato Hill	21C14	4500	4/1	Late Report		17.9	33.3
White Pass (E. Side)	21C28	4500	3/18	105	39.7	11.1	24.7
			4/2	98	36.9	11.9	25.9
White Pass (L. Lake)	21C27	4500	3/28	104	44.9	14.4	31.1
Willame Creek	21C30	3250	4/1	Late Report		13.8	31.4
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	3/27	154	71.3	25.7	48.0
Longmire	21C03	2760	3/27	52	23.5	0.0	10.2
New Paradise Park	21C35	5500	3/27	215	108.8	48.6	74.1
Stem Glade	21C01	5050	3/27	210	95.6	42.6	73.4
WHITE RIVER							
Cayuse Pass	21C06	5300	4/1	Late Report		54.5	90.2
Corral Pass	21B13	6000	4/1	Late Report		32.5	42.0
Morse Lake	21C17	5400	4/1	Late Report		42.8	61.8
GREEN RIVER							
Airstrip	21B24	1800	4/4	0	0.0	0.0	1.3
Charley Creek	21B25	1200	4/4	0	0.0	0.0	0.0
Cougar Mountain SP	21B42SP	3200	4/3	83	36.6	5.0	-
Grass Mtn. No. 2	21B27	2900	4/4	96	41.7	10.7	24.4
Grass Mtn. No. 3	21B28	2100	4/4	3	1.5	0.0	4.4
Lester Creek	21B29	3100	4/4	98	40.2	12.7	27.0
Lynn Lake	21B50	4000	4/4	109	51.7	10.7	-

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1974 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
GREEN RIVER (Cont.)							
Sawmill Ridge	21B31	4700	4/4	144	61.0	19.7	41.5
Snowshoe Butte SP	21B43SP	5000	4/1	Late Report		38.2	-
Stampede Pass SP	21B10	3860	3/15	195	66.8	26.0	41.2
			4/2	162	61.1	27.2	43.4
Twin Camp	21B30	4100	4/4	103	44.5	15.3	25.9
CEDAR RIVER							
City Cabin	21B03	2390	3/27	69	31.8	3.0	15.5
Mt. Gardner	21B21	3300	3/29	69	33.5	0.0	18.0
Mt. Lindsay	21B16	2500	3/29	56	24.4	5.7	15.9
Mt. Washington New	21B52	3000	3/29	35	16.4	0.0	New Course
Rex River	21B17	2400	3/29	75	33.2	4.8	13.5
S. F. Cedar	21B06	3000	3/27	83	38.3	5.6	20.6
Tinkham Creek	21B20	3400	3/27	102	48.7	6.5	23.7
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	3/28	162	82.0	25.9	-
Lake Elizabeth	21B19	2900	3/26	165	82.8	19.7	48.5
Olallie Meadows	21B02	3625	4/1	Late Report		19.6	48.8
S. F. Tolt	21B18	1900	3/28	0	0.0	0.0	0.8
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	3/26	165	82.8	19.7	48.5
Stevens Pass	21B01	4070	3/15	201	83.1	34.0	50.8
			3/28	168	77.0	35.0	53.7
Stevens Pass S. Shed	21B45	3700	3/15	162	64.8	20.3	-
			3/28	131	60.8	20.8	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	4/1	Late Report		3.6	12.6
Beaver Pass	21A01	3680	4/1	Late Report		19.0	33.7
Brown Top	21A28a	6000	4/1	Late Report		50.0	-
Cloudy Pass	20A22a	6500	4/1	Late Report		35.0	54.0
Devils Park	20A04	5900	4/1	Late Report		34.0	45.6
Freezeout Cr. Trail	20A01	3500	3/8	68	21.7	8.6	11.8
			4/1	Late Report		9.2	12.5
Freezeout Meadows New	20A38	5000	4/1	Late Report		23.7	29.9
Granite Creek	21A29	3500	4/1	Late Report		11.4	-
Harts Pass	20A05A	6500	4/1	Late Report		33.3	46.4
Hozomeen Lake	21A02	2600	4/1	Late Report		3.1	9.0
Klesilkwa	35B-Can	3700	4/2	53	21.6	6.8	15.3*
Lyman Lake +	20A23A	5900	4/1	Late Report		43.3	61.5

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1974 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SKAGIT RIVER (Cont.)							
Meadow Cabins	20A08	1900	4/1	Late Report		1.0	6.0
New Hozomeen Lake	21A30	2800	4/1	Late Report		6.6	-
New Tashme	26A-Can	2500	4/1	36	14.6	1.5	10.8*
Quartette Lake	34-Can	4000	3/27	48	12.9	7.9	15.1*
Rainy Pass	20A09	4780	4/1	Late Report		30.8	41.6
Thunder Basin	20A07	4200	4/1	Late Report		15.5	23.9
BAKER RIVER							
Baker Pass +	21A27a	4900	3/7	288	109.0	-	-
			4/1	Late Report		-	-
Dock Butte	21A11A	3800	3/7	248	94.0	45.6	61.3
			3/15	246	103.0	-	74.3
			4/1	Late Report		56.2	71.3
Easy Pass	21A07A	5200	3/7	264	100.0	41.8	72.0
			3/15	272	101.0	-	79.1
			4/1	Late Report		61.7	87.0
Jasper Pass	21A06A	5400	3/7	292	111.0	60.0	81.6
			3/15	292	122.0	-	83.5
			4/1	Late Report		69.4	99.0
Komo Kulshan	21A17	800	4/1	Late Report		0.0	6.0
Marten Lake	21A09A	3600	3/7	264	100.0	57.0	59.4
			3/15	268	112.0	-	72.0
			4/1	Late Report		59.8	78.1
Mount Blum +	21A18a	5800	3/7	198	75.0	47.5	58.2
			3/15	188	79.0	-	-
			4/1	Late Report		-	-
Panorama New	21A26	4300	3/12	246	111.5	55.1	-
			3/28	223	112.0	59.3	-
Rocky Creek	21A12A	2100	3/7	130	49.0	11.4	25.4
			3/15	124	52.0	-	28.7
			4/1	Late Report		16.9	29.2
Schreibers Meadow	21A10A	3400	3/7	216	82.0	27.4	53.8
			3/15	191	80.0	-	57.3
			4/1	Late Report		47.2	65.6
S. F. Thunder Creek	21A14A	2200	3/7	48	18.0	0.0	8.1
			3/15	46	19.0	-	9.4
			4/1	Late Report		0.0	5.3
Sulphur Creek	21A13	1600	4/1	Late Report		2.2	13.6
Three Mile Creek	21A15	4500	4/1	Late Report		0.0	1.7
Watson Lakes	21A08A	4500	3/15	230	97.0	-	61.1
			4/1	Late Report		47.8	71.2

Average based on 1958-72 average
* Average for years of record
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

SNOW DATA TO APRIL 1, 1974 - APPENDIX 10

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	4/4	192	92.2	44.6	51.0
Canyon +	21A20a	5100	4/4	240	115.2	61.2	60.0
Glacier Creek	21A23	3700	3/28	97	43.2	15.1	23.4
Panorama New	21A26	4300	3/12	246	111.5	55.1	-
			3/28	223	112.0	59.3	-
Twin Lakes +	21A21a	5200	4/4	254	121.9	72.4	79.1
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	3/31	144	60.9	31.1	-
ELWHA RIVER							
Hurricane	23B03	4500	3/30	91	36.8	16.5	26.1
SKOKOMISH RIVER							
Black & White	23B07	4200	4/3	167	69.5	32.2	45.6
Black & White Lakes	23B06	4700	4/3	208	95.0	52.3	65.8
Four Streams	23B10	3000	4/3	127	56.6	20.1	34.7
Home Sweet Home	23B05	5200	4/3	264	113.7	62.5	80.6
LATE REPORTS							
WHITE RIVER							
Corral Pass	21B13	6000	4/6	153	63.7		
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	4/5	184	89.1		

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation.

USDA SCS-PORTLAND, OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
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COOPERATIVE SNOW SURVEYS

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"The Conservation of Water begins with the Snow Survey"

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In 36wwa

WATER SUPPLY OUTLOOK FOR WASHINGTON

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AT URBANA-CHAMPAIGN

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
MAY 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

SCS PHOTO A-2112-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technicol Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecost ond Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and tor British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbio

USDA-SCS-PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

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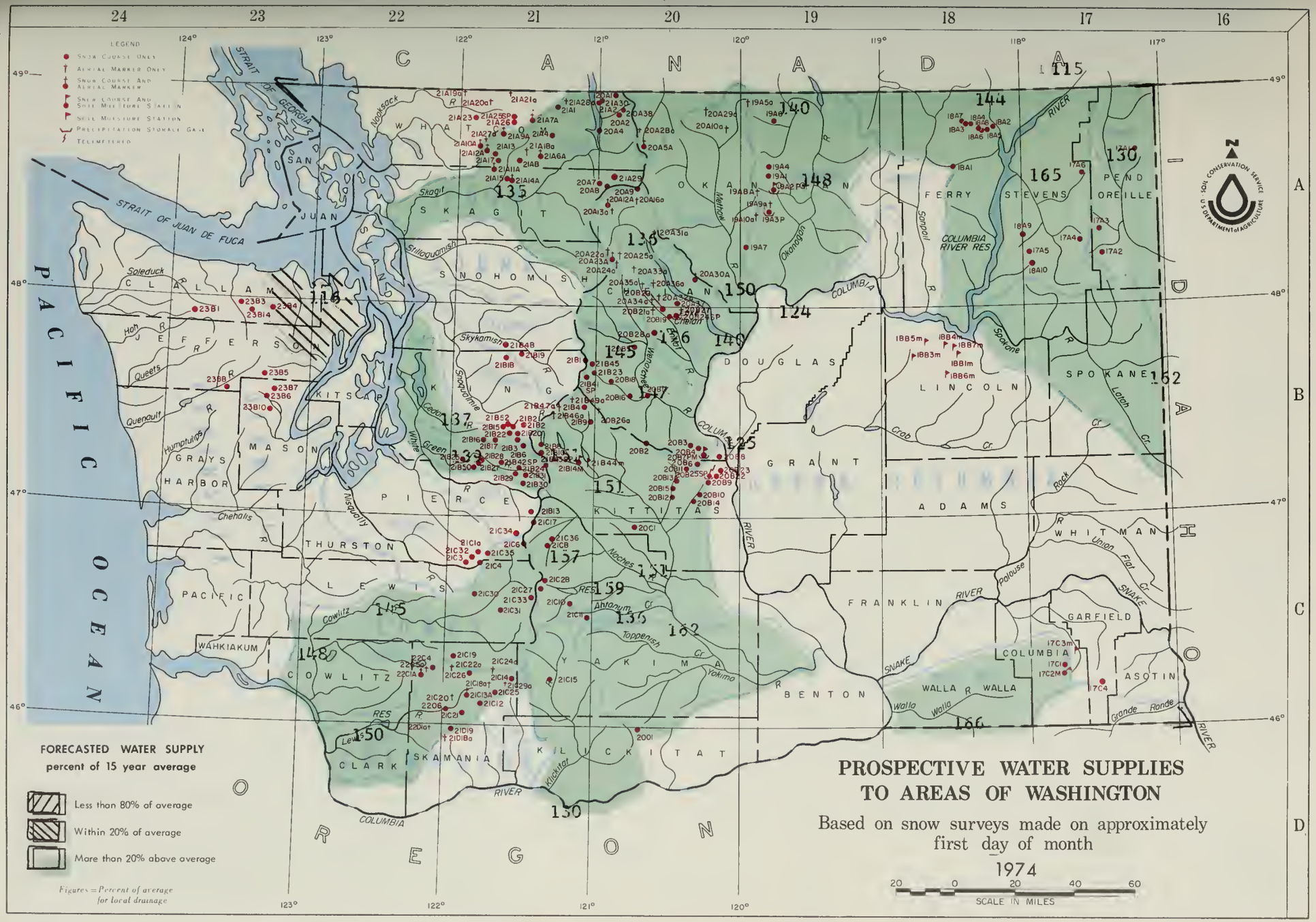
SPOKANE, WASHINGTON 99201


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1974
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
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CANADA
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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT of AGRICULTURE

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370

Sonpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Sherman Creek Pass	18A1	19	36N	35E	5350

Okonogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelon Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5500

Wenotchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B1B	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700

Wenatchee River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crob Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290

Yakimo River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Park	23B4	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23B14	29	28N	6W	

Elwho River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	2383	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900

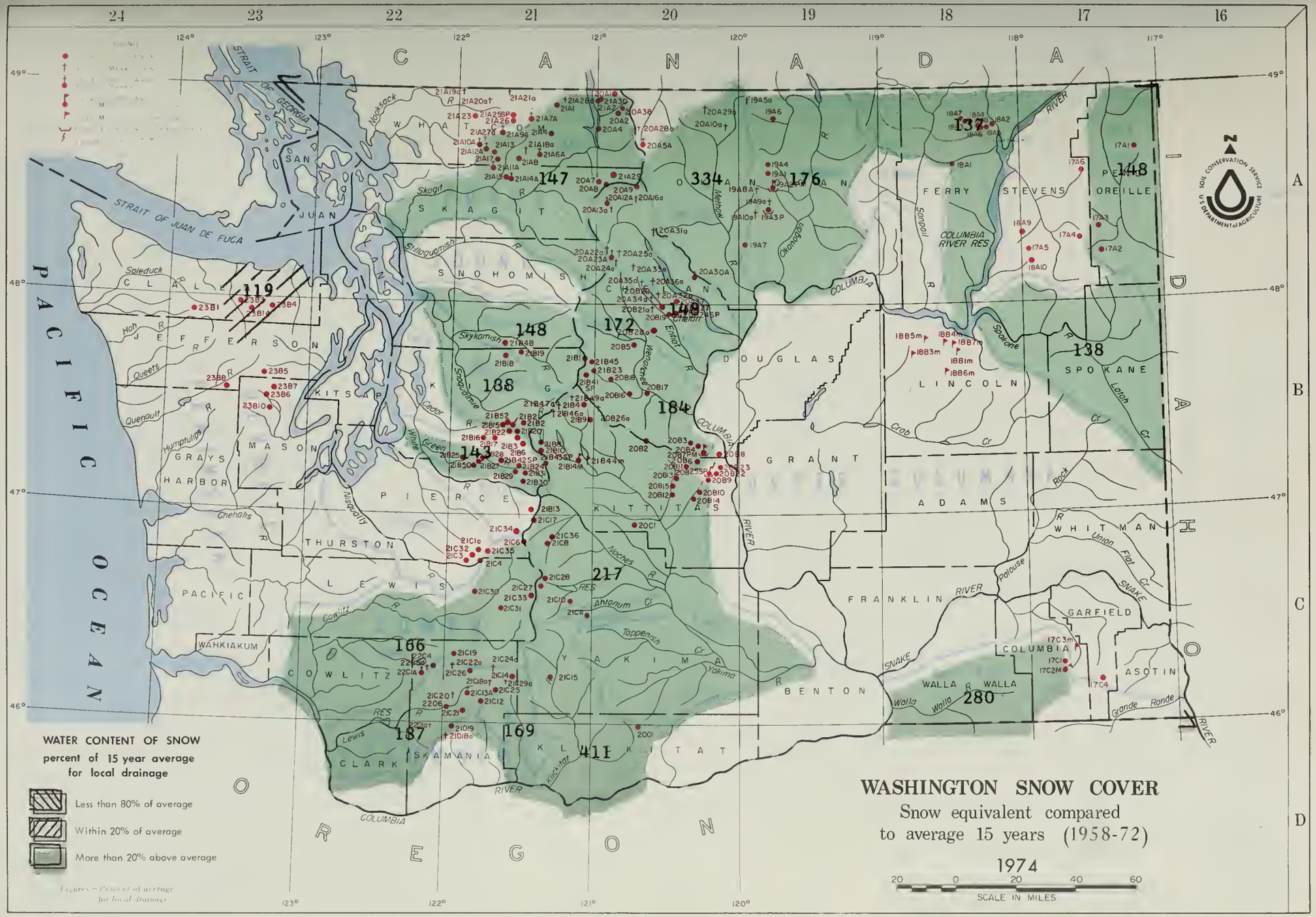
Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1974
SCALE IN MILES
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
OREGON
PACIFIC OCEAN
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CHELAN
OKANOGAN
FERRY
STEVENS
PEND OREILLE
COLUMBIA RIVER RES
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
KITTITAS
DOUGLAS
LINCOLN
SPOKANE
GRANT
ADAMS
WHITMAN
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
YAKIMA
FRANKLIN
BENTON
GARFIELD
COLUMBIA
WALLA WALLA
ASOTIN
CLARK
SKAMANIA
KLICKITAT
147
334
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137
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20ASA	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	13E	3700
Wenatchee River (continued)					
Trough #2	20B2SSP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	8	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	29	28N	6W	
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	2387	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM (EXAMPLE)

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
May 1, 1974

** * * *

RESERVOIRS

The high runoff of the last two months has made it difficult for reservoir managers to lower the lake levels on multi-purpose reservoirs, therefore many of these reservoirs have more water in storage as of May 1 than normal for this time of year. The exceptions are Franklin D. Roosevelt Lake and Chelan Lake. The five reservoirs in the Yakima Drainage have less water than normal, about 15% less, and small reservoirs, with little or no use for flood control purposes, are slightly above normal for this time of year. Franklin D. Roosevelt Lake is below its usable capacity level. This has been brought down for the removal of the coffer dam in front of the third power house. The dam is now removed and the fore bay and lake are starting to fill. With normal conditions, Franklin D. Roosevelt Lake should be full approximately July 1.

PRECIPITATION

Only the northeastern section of Washington and the northwest slopes of the Cascades had subnormal rainfall during the month of April, this reported by the National Weather Service. These two areas are 9% and 4% below normal, respectively. The Columbia River in Canada had rainfall 27% above normal and the Pend Oreille-Spokane Drainage precipitation was 16% greater. Southwest Washington had the most rain of all areas - 53% greater than average. In the central area, rainfall was approximately 25% above average. This same percentage rainfall also occurred on the southwest slopes of the Cascade Range.

STREAMFLOW

During the month of April, all rivers flowed well above normal with the Walla Walla River, as measured near Touchet, setting a new high for the month of April. The range of runoff was from 7% above normal for the Skagit River as measured at Concrete to this high of 119% greater on the Walla Walla. Most low elevation streams had a higher runoff than those originating at the higher elevations. This was due, in part, to the above normal rainfall and the current saturated situation of the soil mantle. Any precipitation occurring has to run off because the soil mantle is full. Forecasts of streamflow have been increased slightly, percentagewise, from that which was reported last month; this, in spite of high runoff. The range is now from 15% above normal at Birchbank to a high of 62% above for the Yakima River near Parker and 65% above on the Colville River at Kettle Falls. The Mill Creek, draining into the Walla Walla River near Walla Walla, is expected to flow 66% above normal. Numerical forecasts can be found following this narrative statement.

STREAMFLOW FORECASTS - MAY 1974

ne following summarized runoff forecasts are based principally on mountain snow-over and on the assumption that precipitation and temperature will be near average rom the present time to the end of the forecast period. Appreciable deviations rom normal of temperature and/or precipitation will correspondingly modify these orecasts. Streamflow figures for 1973 are preliminary and subject to revision.

asin, Stream and Station	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	Seasonal Streamflow in Thousands of Acre-Feet 1973	1972	1971	15-Yr. Average 58-72
			COLUMBIA BASIN				
olumbia River System							
olumbia River	49800	115	May-Sept	32819	53649	45815	43514
at Birchbank 1/	39500	114	May-July	25884	43659	36572	34632
	29400	119	May-June	18223	31436	26832	24633
olumbia River	77300	124	May-Sept	41905	77387	70587	61962
at Grand Coulee 1/	64100	125	May-July	34211	65326	59185	51473
	50000	128	May-June	25885	49770	45787	39153
olumbia River	84800	125	May-Sept	45114	89947	77135	67934
bl Rock Island Dam 1/	70600	124	May-July	37164	76536	65272	56790
	54400	126	May-June	27954	58145	50620	43202
olumbia River	116000	130	May-Sept	57890	119696	111599	91599
at The Dalles, Or 1/	98000	128	May-July	47028	102877	95796	76822
	78600	131	May-June	36089	81356	76452	60087
END OREILLE RIVER SYSTEM							
end Oreille River	17800	130	May-Sept	6929	17909	16692	13737
bl. Box Canyon	16200	130	May-July	6338	16336	15402	12471
	13400	127	May-June	5507	13725	12997	10561
TTLE RIVER SYSTEM							
ttle River	2330	144	May-Sept	983	2068	2020	1614
nr. Laurier	2250	147	May-July	956	1984	1956	1534
	2020	146	May-June	887	1743	1707	1381

/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1974	% 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr. Average 58-72
		Seasonal Streamflow in Thousands of Acre-Feet					
Kettle River System (Cont.)							
Colville River	150	165	May-Sept	32	76	108	91
at Kettle Falls	135	169	May-July	29	65	96	80
	115	162	May-June	27	56	84	71
Spokane River System *							
Spokane River	3250	162	May-Sept	760	3100	2984	2010
at Post Falls ID 2/	3140	163	May-July	713	2973	2840	1926
	2900	161	May-June	650	2742	2566	1800
Okanogan River System							
Similkameen River	2000	140	May-Sept	673	3118	1865	1425
nr. Nighthawk	1860	140	May-July	629	2949	1774	1333
	1600	141	May-June	554	2426	1511	1131
Okanogan River	2350	148	May-Sept	704	3603	2096	1587
nr. Tonasket	2100	145	May-July	646	3273	1948	1446
	1750	144	May-June	561	2646	1643	1213
Methow River System							
Methow River	1420	150	May-Sept	466	1818	1263	946
nr. Pateros	1280	146	May-July	430	1678	1183	879
	1120	150	May-June	370	1383	985	748
Chelan River System							
Chelan River	1600	140	May-Sept	702	1730	1456	1140
at Chelan 3/	1420	142	May-July	605	1483	1258	999
	1080	141	May-June	469	1114	924	767
Stehekin River	1130	136	May-Sept	490	1167	1044	830
at Stehekin	960	136	May-July	396	975	878	702
	740	141	May-June	301	704	608	526
Entiat	280	126	May-Sept	-	372	298	223
nr. Ardenvoir	260	127	May-July	-	335	268	204
	210	127	May-June	-	257	197	165

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversion by Rathdrum Prairie Canal.

3/ Observed flow corrected for storage in Lake Chelan.

asin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr. Average 58-72
enatchee River System							
enatchee River	1690	145	May-Sept	689	1764	1544	1165
at Plain	1510	145	May-July	608	1523	1355	1040
	1200	148	May-June	488	1109	952	809
enatchee River	2330	147	May-Sept	903	2538	2104	1583
at Peshastin	2070	145	May-July	808	2216	1862	1426
	1620	145	May-June	656	1634	1318	1121
temilt Basin	150*	109	May-Sept	-	145*	148*	138*
nr. Wenatchee							
akima River System							
akima River	175	151	May-Sept	64	196	176	116
nr. Martin 4/	160	154	May-July	58	174	163	104
	134	151	May-June	51	143	124	89
akima River	1200	151	May-Sept	441	1328	1194	794
at Cle Elum 5/	1070	152	May-July	376	1188	1073	706
	910	153	May-June	319	969	828	593
akima River	2160	162	May-Sept	415	2732	2543	1328
nr. Parker 6/	2150	165	May-July	423	2572	2290	1298
	1850	157	May-June	432	2195	1823	1178
achess River	158	158	May-Sept	52	174	147	100
nr. Easton 7/	151	162	May-July	48	161	148	93
	128	158	May-June	44	132	115	81
le Elum River	610	148	May-Sept	233	679	579	410
nr. Roslyn 8/	560	151	May-July	206	603	520	371
	460	150	May-June	172	469	385	306

Thousands of Miners' Inches.
/ Observed flow corrected for storage in Lake Keechelus.
/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
/ Observed flow corrected for storage in Lake Kachess.
/ Observed flow corrected for storage in Lake Cle Elum.

Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Forecast period	1973	1972	1971	15-Yr. Average 58-72
Yakima River System (Cont.)							
Bumping River	203	157	May-Sept	63	211	183	129
nr. Nile 9/	186	158	May-July	57	186	164	118
	151	157	May-June	51	138	114	96
American River	175	156	May-Sept	59	168	162	112
nr. Nile	162	157	May-July	54	151	145	103
	125	147	May-June	47	119	104	85
Tieton River	340	159	May-Sept	140	369	297	214
at Tieton Dam 10/	280	157	May-July	107	304	243	178
	210	151	May-June	81	229	169	139
Naches River	1130	151	May-Sept	366	1313	1038	748
nr. Naches 11/	1030	153	May-July	309	1175	937	669
	850	152	May-June	260	942	722	557
Ahtanum Creek	53	136	May-Sept	16	65	55	39
nr. Tampico 12/	48	137	May-July	14	59	49	35
	42	140	May-June	12	49	40	30
Lower Columbia River System							
Mill Creek	30	166	May-Sept	13	24	21	18
nr. Walla Walla	25	178	May-July	9	19	17	14
	22	183	May-June	6	15	15	12
Lewis River	1400	150	May-Sept	570	1199	1443	933
at Ariel 13/	1220	159	May-July	440	993	1222	765
	1000	155	May-June	354	837	958	643
Cowlitz River	2390	145	May-Sept	-	2526	2383	1650
Blw. Mayfield Dam	2090	150	May-July	-	2149	2045	1391
	1660	148	May-June	-	1679	1517	1123

9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (combined)
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.

Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1973	1972	1971	15-Yr. Average 58-72
Lower Columbia River System (Cont.)							
Cowlitz River							
at Castle Rock 14/	3110	148	May-Sept	1224	3036	3043	2093
	2700	155	May-July	1007	2548	2587	1741
	2140	152	May-June	831	1999	1918	1407
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	170	116	May-Sept	-	183	178	147
nr. Sequim	137	115	May-July	-	146	136	119
	105	124	May-June	-	102	88	85
PUGET SOUND							
Skagit River System							
Skagit River	2750	135	May-Aug	-	3162	2574	2037
at Newhalem 15/							
Cedar River System							
Cedar River	125	137	Apr-Sept	-	122	120	91
at Cedar Falls							
Green River System							
Green River	305	139	May-Sept	120	342	313	220
Blw. Howard Hansen Dam							

4/ Observed flow corrected for storage in Mayfield Reservoir.

5/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about May 1, 1974 as percent of the same date in 1973 and 1972 and average of record

Tributary Basin	No. of Courses Average	1974 Snow Water Expressed as percent of 1973	1972	1958-72 Avg.
UPPER COLUMBIA BASIN				
Pend Oreille	15	248	105	148
Kettle	11	192	103	137
Spokane	9	378	85	138
Okanogan	32	235	92	176
Methow	5	303	123	334
Chelan	2	226	90	148
Entiat	8	305	105	172
Wenatchee	8	765	77	184
Yakima	13	484	98	217
LOWER COLUMBIA				
Mill Creek	1	755	155	280
Klickitat	1	-	-	411
White Salmon	2	432	109	169
Lewis	16	776	113	187
Cowlitz	4	370	101	166
PUGET SOUND				
Nisqually	4	296	85	-
White	1	256	99	-
Green	3	258	113	143
Snoqualmie	1	503	112	188
Skykomish	2	376	98	148
Skagit	14	361	85	147
Nooksack	1	254	132	-
OLYMPIC PENINSULA				
Skokomish	3	202	112	-
Elwha	1	232	93	119

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (May) 1974	1973	1972	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	419.1	116.1	208.7	253.2
Columbia	Franklin D. Roosevelt Lake	5232.0	-1948.0	-42.5	497.3	1654.6
Columbia	Banks Lake	761.8	548.2	319.0	213.2	457.7
Okanogan	Conconully Reservoir	13.0	10.1	11.2	10.6	11.2
Okanogan	Salmon Lake	10.5	9.9	9.9	9.5	7.8
Chelan	Lake Chelan	676.1	188.5	195.2	205.1	225.1
		YAKIMA				
Yakima	Keechelus Lake	157.8	116.5	127.0	106.1	121.2
Kachess	Kachess Lake	239.0	149.8	188.4	161.2	199.2
Cle Elum	Lake Cle Elum	436.9	249.7	319.0	171.6	310.9
Bumping	Bumping Lake	33.7	8.4	16.8	6.4	16.1
Tieton	Rimrock Lake	198.0	144.3	131.5	64.5	146.9
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	700.2	722.2	768.7	368.5
Skagit	Diablo Reservoir	90.6	85.7	88.4	88.4	85.7
Skagit	Gorge Reservoir	9.8	7.9	8.4	8.4	-

1/ Based on Active Storage

* 15-year average 1958-72

SOIL MOISTURE - MAY

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of May 1 1974	1973	1972
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	3.8	3.7	3.8
Trout Creek	3-M	3600	48	7.3	Late	3.6	5.6
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	4.8	4.8	4.8
Lake Cle Elum	21B14M	2200	48	12.8	9.1	9.1	9.1
WALLA WALLA							
Couse	17C3m	3650	48	11.1	N/M	7.4	10.5
Helmers	17C2M	4400	48	12.0	N/M	9.9	10.7
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	13.0	9.2	12.2

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1973	1972	1971
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	2.6	2.8	2.7
Trout Creek	3-M	3600	48	7.3	2.8	3.3	3.3
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	2.6	4.1	2.1
Lake Cle Elum	21B14M	2200	48	12.8	6.1	8.7	7.1
WALLA WALLA							
Couse	17C3m	3650	48	11.1	5.6	6.0	6.2
Helmers	17C2M	4400	48	12.0	7.6	7.7	8.2
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	6.0	5.7	6.5

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct 1973 2/ Observed	Departure	Nov.-1973--Mar.-1974 Observed	Departure	SPRING April-1974 Observed	Departure
Columbia in Canada	5.14	+ 0.67	15.91	+ 3.16	1.85	+ 0.39
Pend Oreille - Spokane	4.28	- 0.20	32.17	+13.42	2.67	+ 0.37
Northeastern Washington	3.36	- 0.58	17.93	+ 6.82	1.31	- 0.14
Southeastern Washington	3.71	+ 0.48	20.99	+ 7.52	3.10	+ 1.07
Central Washington	4.68	- 0.07	36.60	+ 9.07	2.76	+ 0.57
North Central Washington	3.44	+ 1.82	9.48	+ 2.76	1.11	+ 0.22
Northwest Slope Cascades	11.53	- 1.16	71.63	+19.40	6.13	- 0.24
Southwest Slope Cascades	9.69	+ 1.01	57.29	+15.65	5.74	+ 1.12

Northeastern Washington - Lower Spokane, Colville, Sanpoil and Lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

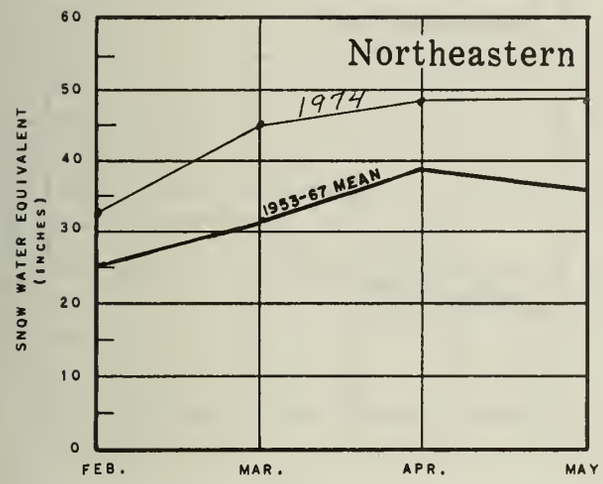
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service

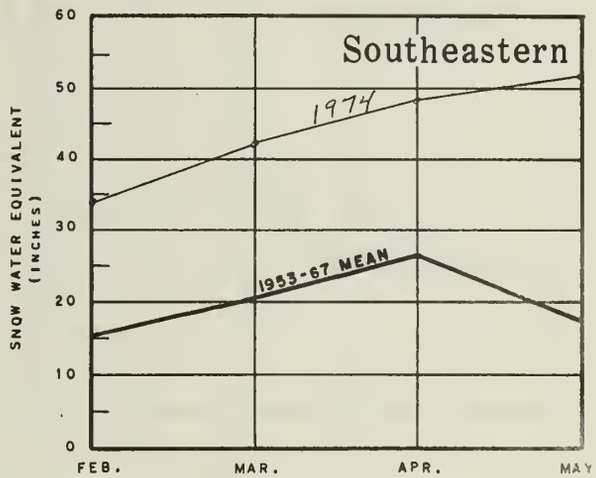
2/ - Departure from 15-year (1958-72) drainage division average.

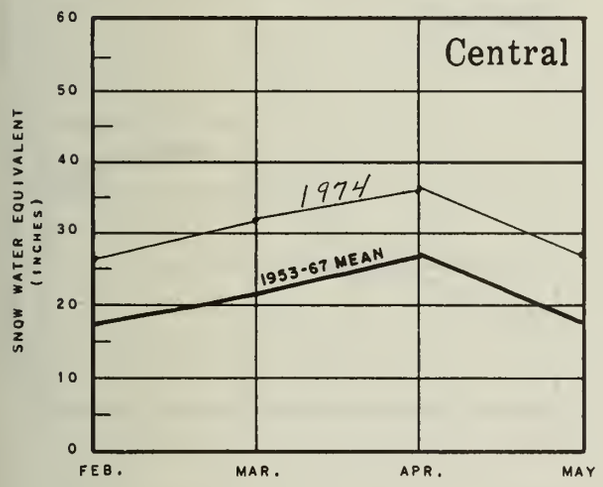
WASHINGTON SNOW COVER

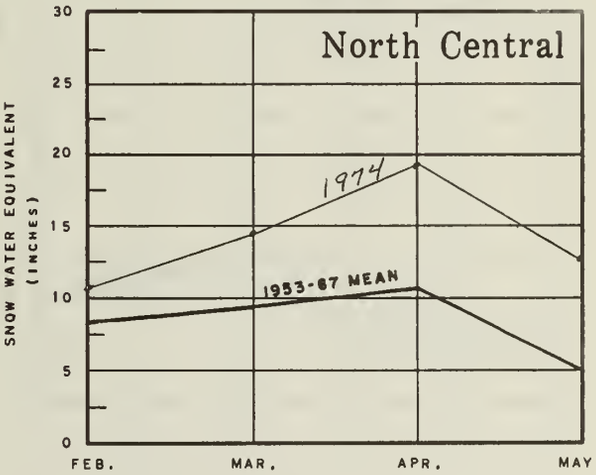
1974

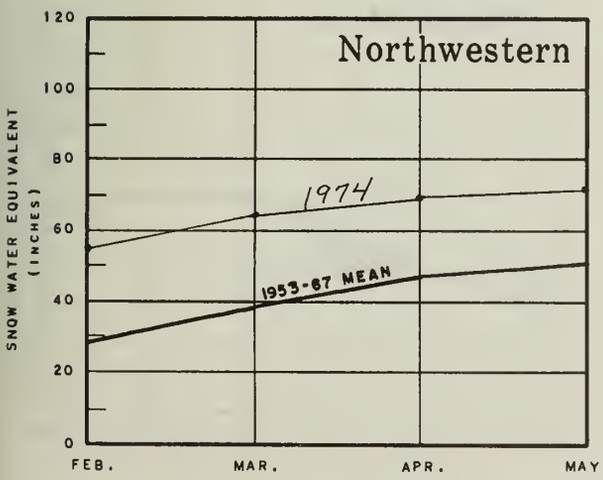
DRAINAGE AREAS

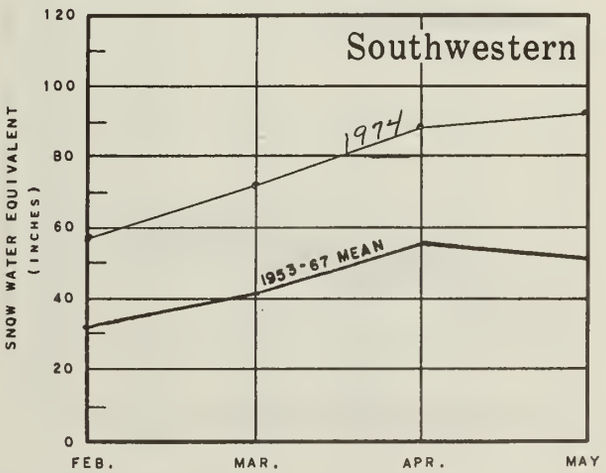










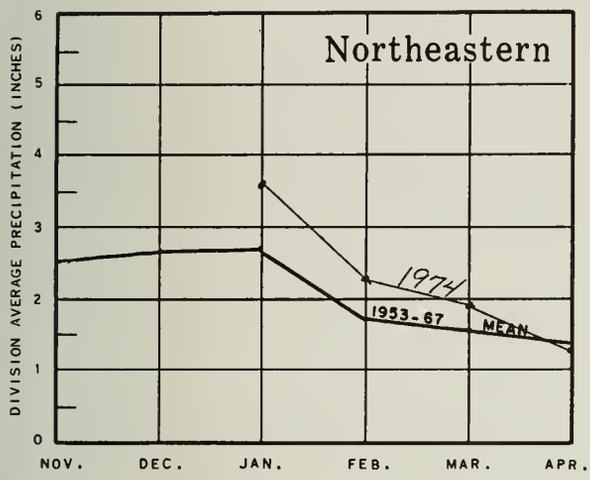


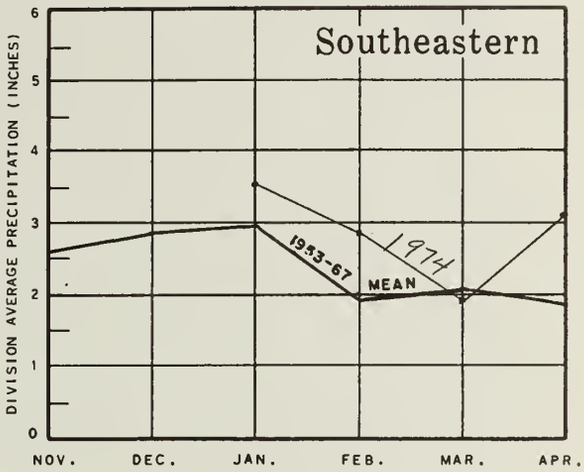
Selected Snow Survey Courses by Soil Conservation Service

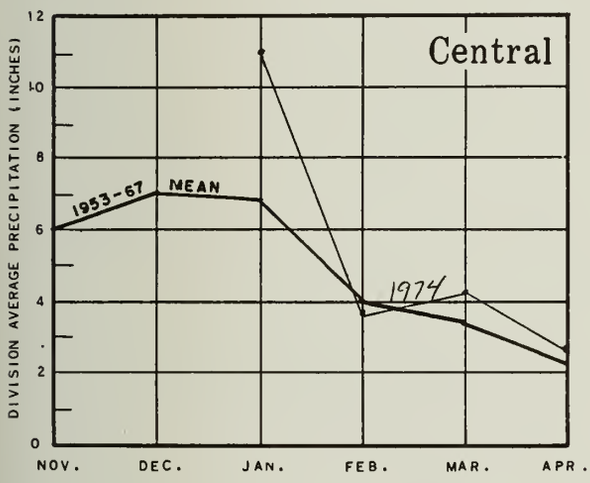
WASHINGTON VALLEY PRECIPITATION

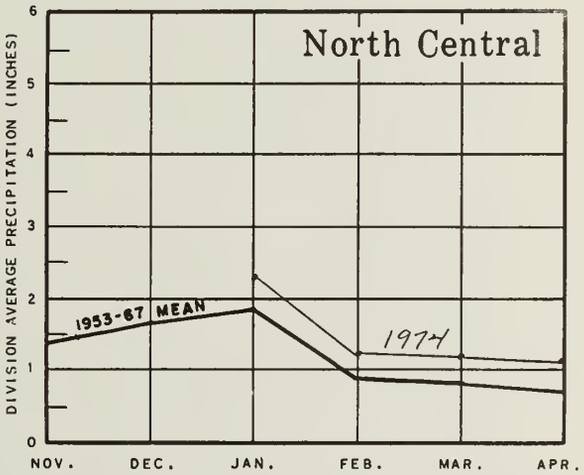
1974

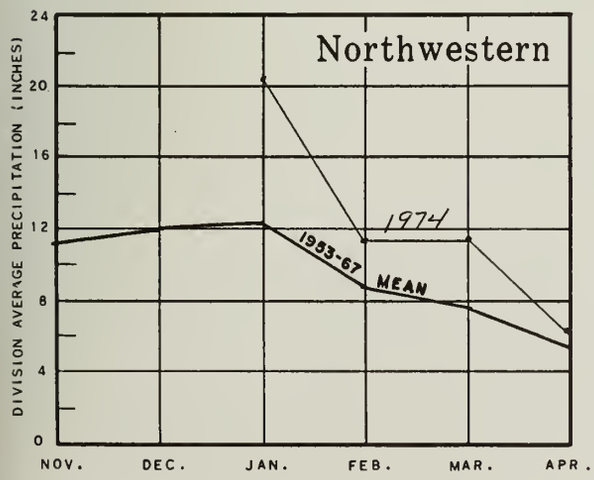
DRAINAGE AREAS

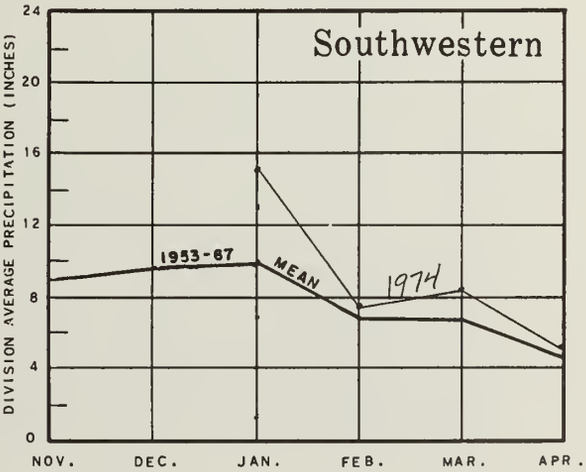












Preliminary Analysis by National Weather Service

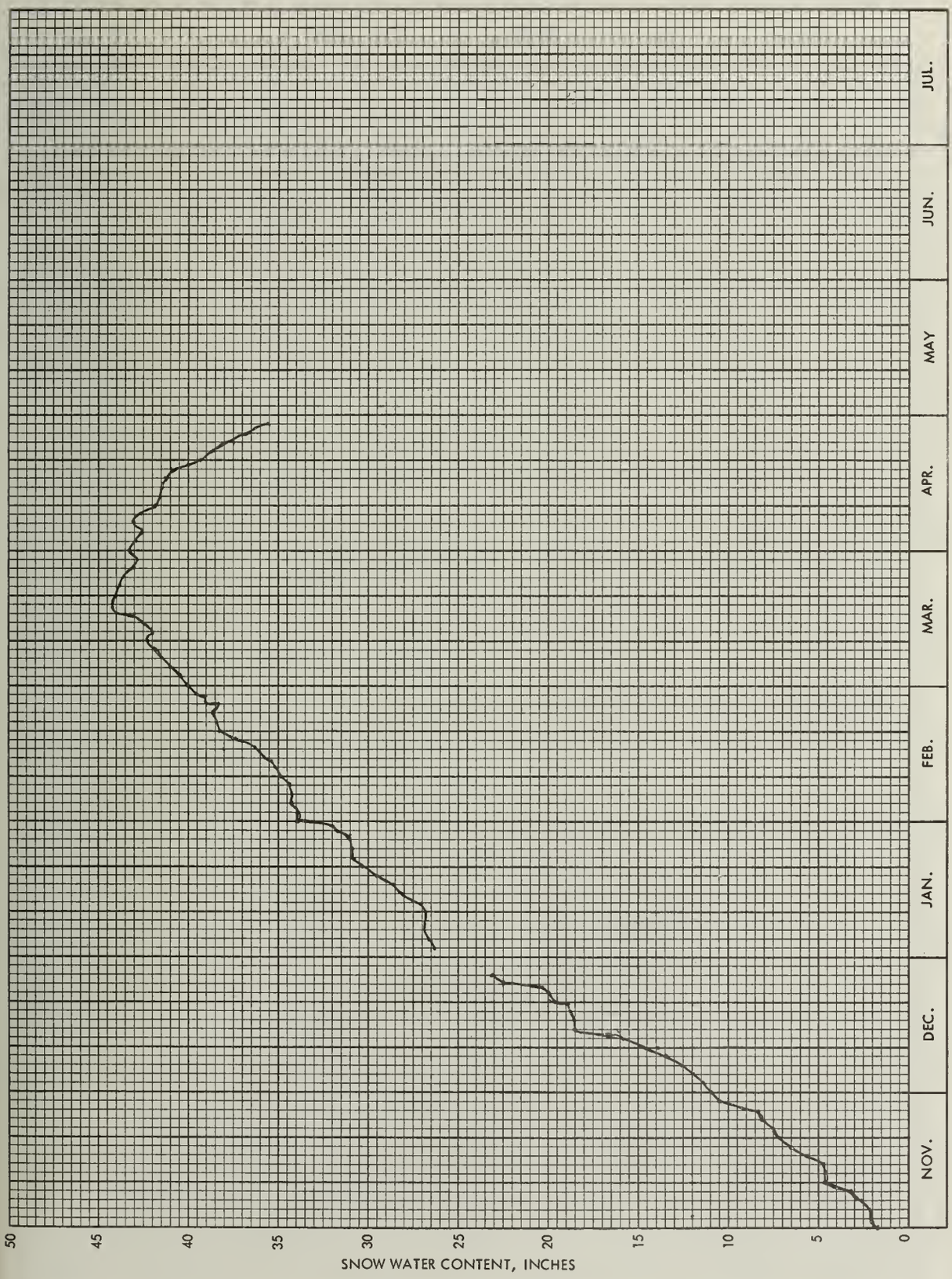
BERRY HILL CREEK

SNOW PILLOW DATA

AS OF MAY 1, 1974

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42' Elev. 3240



M7-0-22028-C1-L

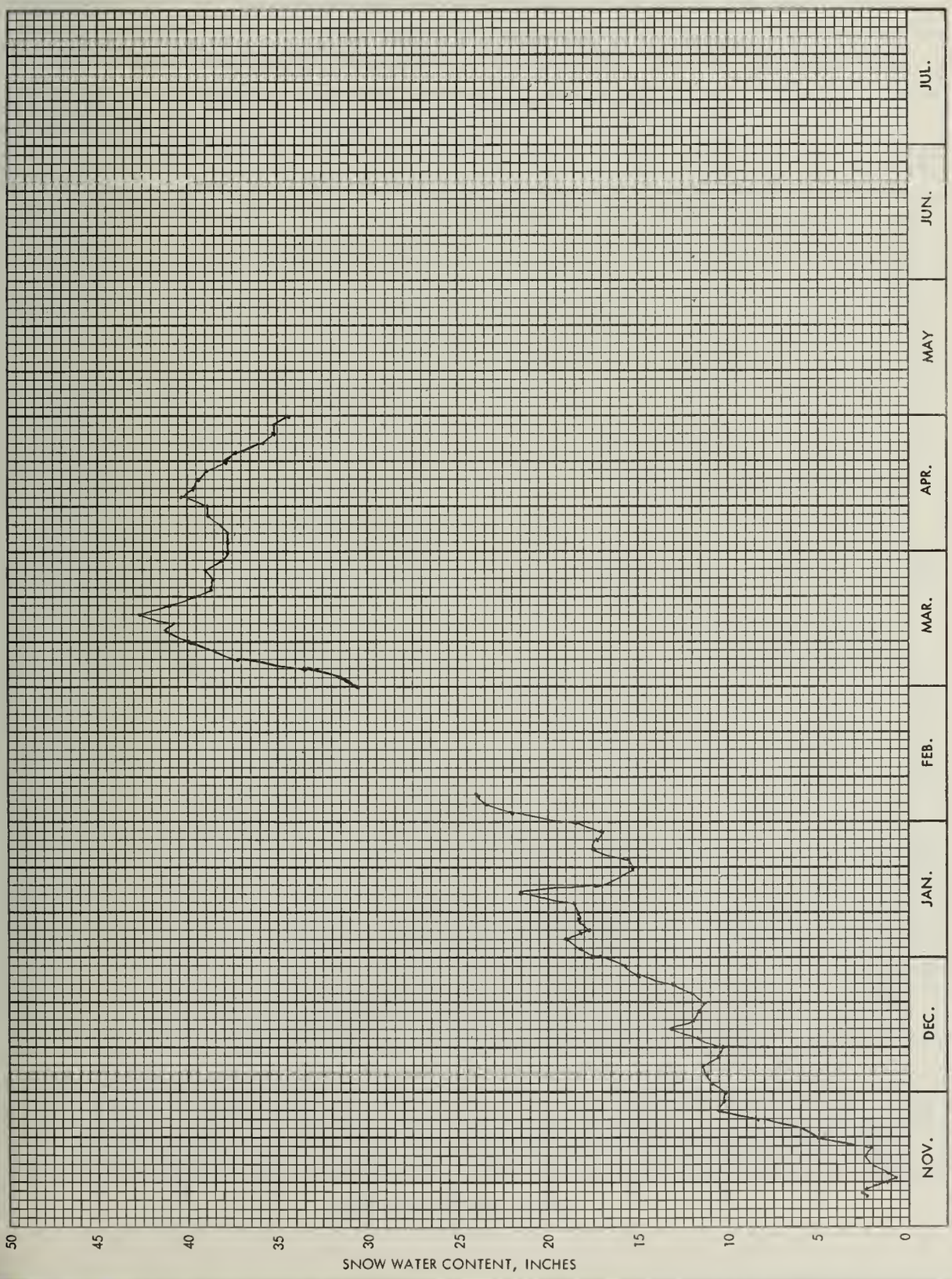
COUGAR MOUNTAIN - FS

SNOW PILLOW DATA

AS OF MAY 1, 1974

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 120° 40' Elev. 3200'



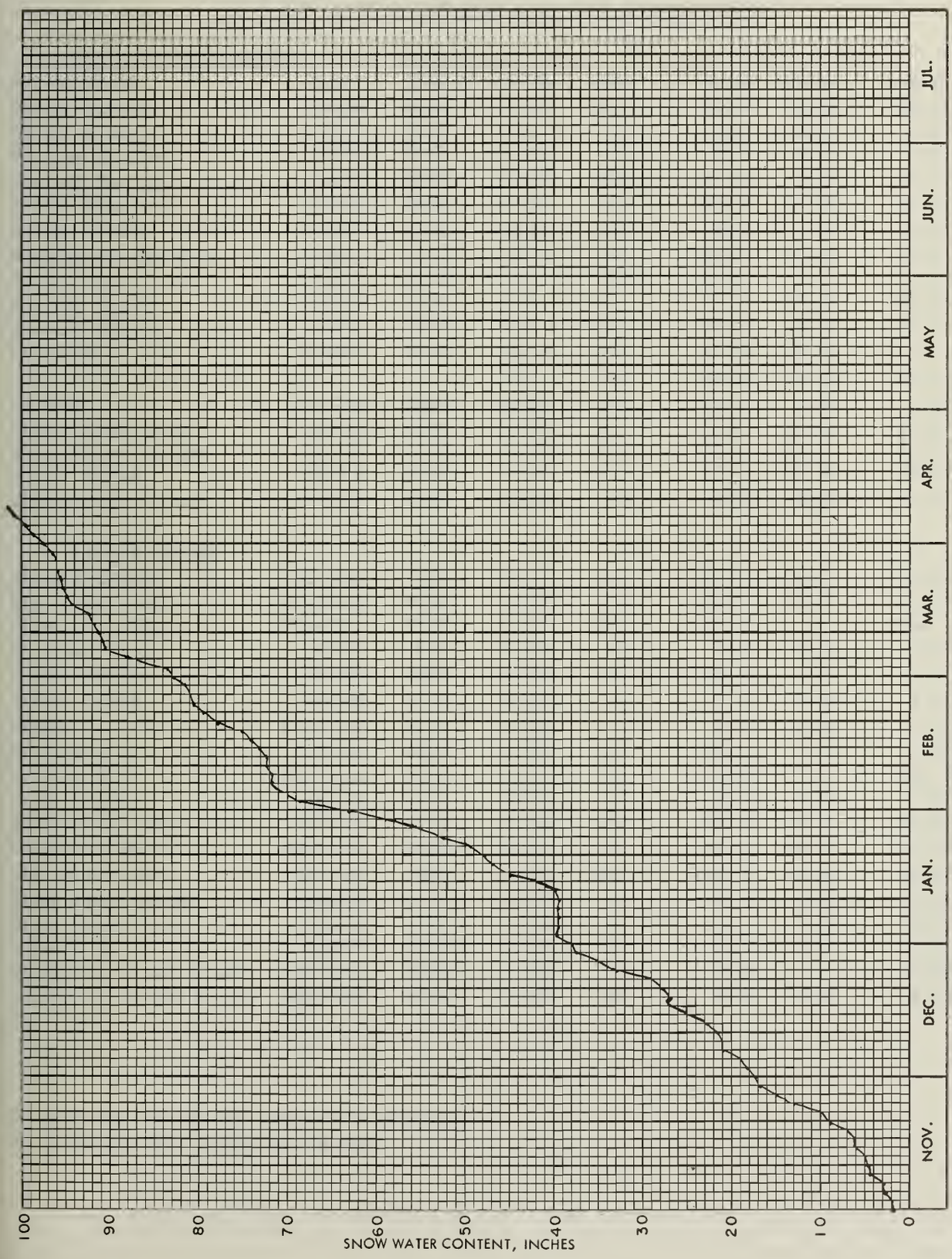
SNOWSHOE BUTTE - FS

SNOW PILLOW DATA

AS OF MAY 1, 1974

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Long. 121° 22' Elev. 5000'



WSFB-X4-L

SNOW DATA TO MAY 1, 1974 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	4/30	148	74.3	26.6	49.6
Baree Midway	15B16	4600	4/30	105	50.9	18.0	35.1
Baree Trail	15B15	3800	5/1	4	1.6	0.0	1.2
Benton Meadow	16A02	2344	4/30	0	0.0	0.0	0.0
Benton Spring	16A03	4900	4/30	58	27.0	9.4	15.7
Boyer Mountain	17A02	5250	4/29	85	40.3	17.6	26.1
Brush Creek	14A04	5000	4/30	24	9.6	5.0	8.2
Bunchgrass Meadow	17A01	5000	4/30	94	48.0	24.8	30.4
Heart Lake Trail	14C10	4800	5/3	58	26.4	1.6	19.0
Hoodoo Basin	15C10	6000	5/3	153	75.2	34.8	55.2
Hoodoo Creek	15C01	5900	5/3	148	72.2	31.6	52.2
Lookout	15B02	5250	4/19	125	56.8	19.2	-
			5/1	110	48.0	16.8	37.7
Nelson	19-Can	3050	4/26	32	11.7	4.2	7.0*
Schweitzer Bowl	16A06	4500	4/30	87	42.2	12.8	26.6
Schweitzer Ridge	16A05	6100	4/30	152	70.5	36.7	50.6
Smith Creek	16A01	4800	4/25	154	75.6	33.4	47.9
Winchester Creek	17A03	2970	4/29	0	0.0	0.0	1.6
KETTLE RIVER							
Barnes Creek	90-Can	5300	4/27	60	26.9	15.9	21.3*
Big White Mtn.	154-Can	5500	4/28	68	30.0	16.7	21.3*
Bluejoint Mtn.	244-Can	7500	4/27	104	46.7	-	New Course
Boulder Road	18A02	1450	4/29	0	0.0	0.0	0.0
Butte Creek	18A03	4070	4/29	24	10.1	4.9	5.9
Cabin Creek	18A08	3170	4/29	4	1.5	0.0	1.5
Carmi	126-Can	4100	4/28	7	2.3	0.0	1.9*
Farron # 1	17-Can	4000	4/26	40	16.1	7.9	8.2*
Farron # 2	243-Can	4000	4/26	39	16.0	7.1	New Course
Goat Creek	18A04	3595	4/29	0	0.0	0.0	0.0
Graystoke Lake	5-Can	5950	4/26	68	29.3	18.4	26.9*
Monashee Pass	48A-Can	4500	4/27	37	15.5	10.5	13.4*
Old Glory Mtn.	42-Can	7000	4/29	106	48.0	26.8	30.8*
Snow Caps Creek	18A05	2150	4/29	0	0.0	0.0	0.0
Snow Caps Trail	18A06	2720	4/29	0	0.0	0.0	0.0
Summit G. S.	18A07	4600	4/29	22	8.5	4.7	6.0
Trapping Creek Lower	166-Can	3050	4/28	0	0.0	-	0.0*
Trapping Creek Upper	165-Can	4450	4/28	24	9.8	3.6	6.1*

Average based on 1958-1972 average
* Average for years of record

USDA-SCS PORTLAND OREGON 1973.

SNOW DATA TO MAY 1, 1974 - APPENDIX 2

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SPOKANE RIVER							
Above Burke	15B08	4100	5/1	64	28.8	3.0	-
Copper Ridge	16B02	4800	4/30	83	37.5	0.0	27.3
Forty-nine Meadows	15B03	5000	4/30	85	34.5	10.0	30.3
Fourth of July Summit	16B03	3100	4/30	0	0.0	0.0	-
Granite Peak	15B13A	6000	4/30	151	60.4	30.9	48.3
Lookout	15B02	5250	4/19	125	56.8	19.2	-
			5/1	110	48.0	16.8	37.7
Lost Lake	15B14A	6000	4/30	245	104.0	35.6	62.0
Lower Sands Creek	16B01	3400	4/30	65	27.1	0.0	16.0
Medicine Ridge	15B04A	6150	4/30	149	59.8	31.2	51.5
Sherwin	16C01	3200	4/30	33	13.0	0.0	-
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	4/30	4	2.0	1.5	1.7*
Blackwall Mountain	100-Can	6250	4/30	112	52.8	27.4	38.8*
Bouleau Lake	234-Can	4580	4/28	47	19.2	11.4	15.3*
Brenda Mine	193-Can	4800	4/29	35	15.5	5.9	10.8*
Brookmere	27-Can	3200	4/30	16	5.6	2.1	5.9*
Carrs Landing Upper	168-Can	3200	4/29	0	0.0	-	0.0
Enderby	130-Can	6250	4/29	145	50.2	38.0	43.1*
Esperon Creek Lower	164-Can	4400	4/28	36	14.8	6.8	11.0*
Esperon Creek Middle	163-Can	4700	4/28	45	20.2	8.5	13.9*
Esperon Creek Upper	162-Can	5400	4/28	68	31.7	12.3	20.4*
Freezeout Meadows New	20A38	5000	4/29	157	79.2	20.9	-
Graystoke Lake	5-Can	5950	4/16	74	29.9	-	-
			4/26	68	29.3	18.4	26.9*
Hamilton Hill	107-Can	4900	4/27	42	15.6	7.9	13.4*
Harts Pass	20A05A	6500	4/29	160	72.9	32.4	50.3
Isintok Lake	152-Can	5510	4/27	36	13.0	5.0	7.3*
Lost Horse Mountain	105-Can	6300	4/29	48	17.0	8.2	10.7*
Loup Loup	19A07	4650	4/29	21	9.2	-	-
McCulloch	4-Can	4200	4/28	10	3.8	1.0	2.8*
Missezula Mountain	106-Can	5100	4/28	37	12.7	-	4.5*
Mission Creek	5A-Can	6000	4/16	84	32.2	-	-
			4/29	74	31.4	17.4	21.7*
Monashee Pass	48A-Can	4500	4/27	37	15.5	10.5	13.4*
Mount Kobau	156-Can	4950	4/30	55	23.5	7.7	13.7*
Mutton Creek No. 1	19A01	5700	4/26	59	28.3	0.0	10.9
Mutton Creek No. 2	19A04	6000	4/26	66	29.1	9.5	15.5
Mutton Creek No. 2SP	19A11SP	6000	4/26	-	25.4	6.7	-
New Copper Mountain	46A-Can	4300	4/29	0	0.0	0.0	3.7*
New Penticton Res. #2	183-Can	5225	4/30	33	12.5	5.8	-
Nickel Plate Mtn.	47-Can	6200	5/2	42	13.7	5.0	7.9*

Average based on 1958-1972 average
* Average for years of record

USDA-SCS PORTLAND, OREGON 1973.

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SNOW DATA TO MAY 1, 1974 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Oyama Lake	203-Can	4400	5/1	Not Measured		2.2	4.2*
Postill Lake	55-Can	4500	5/1	23	9.6	5.2	6.8*
Quartette Lake	34-Can	4000	4/29	38	13.8	6.6	-
Rusty Creek	19A03	4000	4/25	11	5.0	0.0	0.6
Salmon Meadows	19A02	4500	4/26	29	13.1	0.0	5.4
Silver Star Mountain	99-Can	6050	4/14	109	45.8	-	-
			4/28	100	44.7	25.6	27.4*
Summerland Reservoir	3A-Can	4200	4/27	26	10.0	3.8	6.7*
Trout Creek	3-Can	4700	4/28	24	8.6	2.9	5.2*
Vaseux Creek	233-Can	4600	5/2	9	2.8	0.0	2.9*
White Rocks Mountain	70-Can	6000	4/29	85	39.9	18.4	28.3*
METHOW RIVER							
Harts Pass	20A05A	6500	4/29	160	72.9	32.4	50.3
Loup Loup	19A07	4650	4/29	21	9.2	-	-
Mutton Creek No. 1	19A01	5700	4/26	59	28.3	0.0	10.9
Mutton Creek No. 2	19A04	6000	4/26	66	29.1	9.5	15.6
Mutton Creek No. 2SP	19A11SP	6000	4/26	-	25.4	6.7	-
Rusty Creek	19A03	4000	4/25	11	5.0	0.0	0.6
Salmon Meadows	19A02	4500	4/26	29	13.1	0.0	5.4
CHELAN LAKE BASIN							
Rainy Pass	20A09	4780	4/29	129	60.6	33.0	44.3
Safety Harbor	20A30A	6300	4/23	114	46.6	17.3	29.2
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	4/29	118	60.7	23.0	New
Brief	20B19	1600	4/30	0	0.0	-	0.0
Entiat Meadows +	20A33a	4800	4/29	136	69.9	25.0	41.0
Entiat River Trail +	20A34a	3150	4/29	34	15.8	0.0	9.7
Four Mile Ridge +	20B27a	7000	4/29	108	55.5	20.0	-
Fox Camp +	20A36a	6510	4/29	182	93.5	40.0	63.5
Pope Ridge	20B20	4300	4/26	43	20.0	0.0	8.2
Pugh Ridge +	20A32a	6400	4/29	119	61.2	26.5	38.7
Shady Pass	20A37	6200	4/30	91	46.6	14.3	-
Snow Brushy +	20A35a	3850	4/29	97	49.9	14.5	30.8
Tommy Creek +	20B21a	5300	4/29	70	36.0	7.5	22.5

Average based on 1958-1972 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS PORTLAND, OREGON 1973

WSFB-X4-L

SNOW DATA TO MAY 1, 1974 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	4/29	79	39.8	3.8	21.1
Berne-Mill Creek New SP	21B41SP	3240	4/29	65	31.6	0.0	17.7
Blewett Pass No. 2	20B02	4270	4/12	54	23.8	4.2	13.0
			4/29	36	17.5	0.0	9.5
Chiwaukum G. S.	20B16	1810	4/29	0	0.0	0.0	1.8
Fish Lake	21B04	3371	4/25	101	47.9	3.8	26.7
Lake Wenatchee	20B05	1970	4/29	6	3.1	0.0	1.6
Merritt	20B18	2140	4/29	18	8.3	0.0	3.8
Stevens Pass	21B01	4070	4/15	175	83.2	32.9	55.2
			4/29	165	82.6	31.4	55.8
Stevens Pass Sand Shed	21B45	3700	4/15	133	63.4	16.7	-
			4/29	119	59.6	12.2	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	4/30	9	3.9	0.0	1.7
Scout-A-Vista	20B04	3400	4/30	0	0.0	0.0	0.4
STEMILT CREEK							
Jump-Off	20B08	4450	4/29	10	4.6	0.0	2.8
Stemilt Slide	20B06	5000	4/29	32	14.9	0.0	7.1
Upper Wheeler	20B07	4400	4/29	0	0.0	0.0	1.0
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	4/30	31	15.3	0.0	-
Colockum Creek Lower	20B23	4300	4/30	7	3.0	0.0	-
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	5/1	0	0.0	-	0.0
Big Boulder Creek	21B09	3200	4/25	59	28.1	0.0	7.4
Blewett Pass No. 2	20B02	4270	4/12	54	23.8	4.2	13.0
			4/29	36	17.5	0.0	9.5
Bumping Lake	21C08	3450	4/15	64	28.2	3.4	13.4
			4/30	46	19.9	0.0	9.4
Bumping Lake New	21C36	3400	4/15	77	34.2	7.6	-
			4/30	59	26.6	0.0	15.0
Cayuse Pass	21C06	5300	4/12	295	129.2	54.5	90.2
			4/29	272	138.1	53.9	-
Fish Lake	21B04	3371	4/25	101	47.9	3.8	26.7
Joe Lake +	21B46a	4624	4/29	219++	2/	33.8	-
Lake Cle Elum	21B14M	2200	4/15	0	0.0	-	-
			4/29	0	0.0	-	0.0

\# Average based on 1958-1972 average
++ Snow deeper than full length of aerial marker
2/ Marker Buried
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973.

SNOW DATA TO MAY 1, 1974 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
YAKIMA RIVER (Cont.)							
Lemah Creek +	21B47a	3327	4/26	129	65.0	16.2	-
Olallie Meadows	21B02	3625	4/27	179	91.3	19.2	48.4
			4/29	173	91.6	18.2	48.6
Satus Pass	20D01	4030	4/30	16	7.8	0.0	1.9
Stampede Pass	21B10	3860	4/15	156	65.7	23.4	43.4
			4/29	138	62.1	22.2	43.4
Tunnel Avenue	21B08	2450	4/15	77	34.3	4.3	20.1
			4/29	60	27.0	0.0	16.0
Van Epps Pass +	20B26a	5925	4/26	164	75.0	33.3	-
Waptus Lake +	21B49a	3024	4/26	105	50.0	13.5	-
White Pass (E. Side)	21C28	4500	4/16	102	45.4	10.2	26.0
			4/29	95	45.3	-	25.9
White Pass (L. Lake)	21C27	4500	4/29	103	49.5	8.6	28.6
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	5/1	0	0.0	-	0.0
LOWER COLUMBIA							
ASOTIN CREEK							
Spruce Springs	17C04	5700	4/29	88	43.7	9.4	25.8
MILL CREEK							
Tollgate	18D3M	5070	4/26	104	52.9	7.0	18.9
KLICKITAT RIVER							
Satus Pass	20D01	4030	4/30	16	7.8	0.0	1.9
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	4/28	164	79.7	21.9	48.9
Surprise Lakes	21C13A	4250	4/28	185	92.5	18.5	52.9
WIND RIVER							
Old Man Pass	21D19	3100	4/28	58	27.0	0.0	12.6
LEWIS RIVER							
Blue Lake +	21C22a	4800	4/29	292	146.0	53.5	92.4
Bob's Trail	21C21	2200	4/29	38	18.0	0.0	7.8
Calamity Ridge +	22D01a	2500	4/28	0	0.0	0.0	1.3
Council Pass +	21C18a	4200	4/29	136	68.0	16.9	38.8
Cultus Creek	21C12	4000	4/28	164	79.7	21.9	48.9
Divide Meadow +	21C29a	5600	4/29	192	96.0	34.3	65.5
Grand Meadow	21C25	3500	4/28	86	40.2	1.1	22.4

Average based on 1958-1972 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973.

SNOW DATA TO MAY 1, 1974 - APPENDIX 6

NOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
LEWIS RIVER (Cont.)							
Lone Pine Shelter	21C26	3800	4/12	184	83.2	21.4	43.3
			4/29	160	81.0	20.3	46.3
Marble Mountain +	22C05a	3200	4/28	132	72.6	4.3	33.2
Mosquito Meadows	21C19	4100	4/10	167	74.1	22.6	44.9
			4/29	147	72.9	21.7	45.8
New Muddy River	22C06	2000	4/29	0	0.0	0.0	0.8
Old Man Pass	21D19	3100	4/28	58	27.0	0.0	12.6
Plains of Abraham +	21C1a	4400	4/28	236	120.4	45.6	76.9
Smith Creek Road	22C04	2100	4/28	14	6.1	0.0	5.3
Spencer Meadow +	21C20a	3400	4/29	90	43.2	0.0	16.1
Surprise Lakes	21C13A	4250	4/28	185	92.5	18.5	52.9
Table Mountain +	21C24a	4200	4/29	164	82.0	22.1	40.3
Timbered Peak +	21D18a	3000	4/28	52	25.0	0.0	9.9
COWLITZ RIVER							
Cayuse Pass	21C06	5300	4/12	295	129.2	54.5	90.2
			4/29	272	138.1	53.9	-
Mosquito Meadows	21C19	4100	4/10	167	74.1	22.6	44.9
			4/29	147	72.9	21.7	45.8
Ohanapecosh	21C32	2200	4/8	47	20.5	0.0	15.7
Packwood Lake	21C31	2870	4/8	55	23.3	0.0	13.1
Plains of Abraham +	22C01a	4400	4/28	236	120.4	45.6	76.9
Potato Hill	21C14	4500	4/10	128	54.9	17.9	33.3
			4/29	111	53.7	12.8	-
White Pass (E. Side)	21C28	4500	4/15	102	45.4	10.2	26.0
			4/29	95	45.3	-	25.9
White Pass (L. Lake)	21C27	4500	4/29	103	49.5	8.6	28.6
Willame Creek	21C30	3250	4/8	120	55.6	13.8	31.4
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	4/29	162	80.7	22.2	-
Longmire	21C03	2760	4/29	21	10.8	0.0	-
New Paradise Park	21C35	5500	4/29	241	127.8	47.8	-
Stem Glade	21C01	5050	4/29	224	110.0	43.0	-
GREEN RIVER							
Cougar Mountain SP	21B42SP	3200	4/29	52	26.2	0.0	-
Snowshoe Butte SP	21B43SP	5000	4/8	194	89.2	-	-
			4/29	195	100.0	42.6	-
Stampede Pass	21B10	3860	4/15	156	65.7	23.4	43.4
			4/29	138	62.1	22.2	43.4

Average based on 1958-1972 average
+ Snow water equivalent estimated from aerial stadia observation

DA-SCS-PORTLAND, OREGON 1973.

WSFB-X4-L

SNOW DATA TO MAY 1, 1974 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	4/15	175	83.2	32.9	55.2
			4/29	165	82.6	31.4	55.8
Stevens Pass S. Shed	21B45	3700	4/15	133	63.4	16.7	-
			4/29	119	59.6	12.2	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	**4/12	41	18.2	3.6	12.6
			5/1	17	7.3	0.0	4.8
Beaver Pass	21A01	3680	**4/12	118	55.1	19.0	33.7
			4/29	103	50.3	16.4	34.0
Brown Top	21A28a	6000	**4/10	223	90.2	50.0	-
			5/1	213	98.0	47.8	-
Devils Park	20A04	5900	**4/10	149	67.2	34.0	45.6
			4/29	147	67.6	34.9	49.5
Freezeout Cr. Trail	20A01	3500	**4/10	49	19.2	9.2	12.5
			4/29	36	15.8	4.2	8.2
Freezeout Meadows New	20A38	5000	**4/10	168	82.5	23.7	29.9
			4/29	157	79.2	20.9	31.0
Granite Creek	21A29	3500	**4/12	60	24.6	11.4	-
			4/27	48	20.8	4.6	-
Harts Pass	20A05A	6500	**4/10	155	70.1	33.3	46.4
			4/29	160	72.9	32.4	-
Klesilkwa	35B-Can	3700	4/30	37	16.9	1.4	11.3*
Meadow Cabins	20A08	1900	**4/11	6	2.8	1.0	6.0
			4/29	0	0.0	0.0	1.3
New Hozomeen Lake	21A30	2800	**4/10	46	17.8	6.6	-
			4/29	27	11.5	0.0	-
New Tashme	26A-Can	2500	4/30	2	1.1	0.0	5.6*
Quartette Lake	34-Can	4000	4/29	38	13.8	6.6	-
Rainy Pass	20A09	4780	**4/12	142	63.2	30.8	41.6
			4/29	129	60.6	33.0	44.3
Thunder Basin	20A07	4200	**4/11	84	35.8	15.5	23.9
			4/29	78	33.9	14.3	25.5
BAKER RIVER							
Baker Pass +	21A27a	4900	4/13	290	133.0	-	-
Dock Butte	21A11A	3800	**4/12	241	110.6	56.2	71.3
			4/13	230	106.0	59.0	64.0
			5/3	218	106.8	54.0	77.4
Easy Pass	21A07A	5200	4/13	254	117.0	58.0	86.7
			5/2	267	126.3	66.5	93.3
Jasper Pass	21A06A	5400	4/13	290	133.0	78.0	91.1
			5/2	287	134.2	71.8	101.2

Average based on 1958-1972 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation
** April 1 - Late Measurement

USDA-SCS-PORTLAND OREGON 1973.

SNOW DATA TO MAY 1, 1974 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER (Cont.)							
Komo Kulshan	21A17	800	5/3	0	0.0	0.0	0.7
Marten Lake	21A09A	3600	**4/11	258	125.0	59.8	78.1
			4/13	268	129.0	63.0	80.4
			5/2	241	122.3	60.3	83.8
Mount Blum +	21A18a	5800	4/13	206	95.0	68.0	-
Panorama New	21A26	4300	**4/11	238	114.7	58.7	-
			4/28	223	146.1	57.5	-
Rocky Creek	21A12A	2100	**4/10	108	51.9	16.9	29.2
			4/13	96	48.0	18.0	25.5
			5/2	83	37.4	8.7	22.6
Schreibers Meadow	21A10A	3400	**4/10	209	104.2	47.2	65.6
			4/13	194	97.0	42.0	63.0
			5/2	196	100.4	45.4	67.5
S. F. Thunder Creek	21A14A	2200	**4/10	17	7.6	0.0	5.3
			4/13	22	10.0	1.0	1.7
			5/3	0	0.0	0.0	1.1
Sulphur Creek	21A13	1600	**4/10	41	18.0	2.2	13.6
			5/2	16	7.0	0.0	6.4
Three Mile Creek	21A15	4500	**4/10	0	0.0	0.0	1.7
			5/3	0	0.0	0.0	0.0
Watson Lakes	21A08A	4500	**4/12	244	107.5	47.8	71.2
			4/13	216	95.0	59.0	72.9
			5/2	210	98.8	49.6	76.9
NOOKSACK RIVER							
Panorama New	21A26	4300	**4/11	238	114.7	58.7	-
			4/28	223	146.1	57.5	-
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	4/29	125	55.4	27.9	-
ELWHA RIVER							
Hurricane	23B03	4500	5/4	77	32.0	13.8	26.9
SKOKOMISH RIVER							
Black & White	23B07	4200	4/29	146	68.2	31.2	-
Black & White Lakes	23B06	4700	4/29	188	101.6	53.2	-
Home Sweet Home	23B05	5200	4/29	245	126.2	64.3	-

Average based on 1958-1972 average
\+ Snow water equivalent estimated from aerial stadia observation
** April 1 - Late measurement

USDA-SCS-PORTLAND OREGON 1973.

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Conado:

Deportment of Londs, Forests ond Woter Resources,
Woter Resources Service, British Columbio

States:

Woshington State Deportment of Ecology
Woshington Stote Deportment of Naturol Resources

Federol:

Deportment of the Army
Corps of Engineers
U. S. Deportment of Agriculture
Forest Service
U. S. Deportment of Commerce
NOAA, Nationol Weather Service
U. S. Deportment of the Interior
Bonneville Power Administrotion
Bureou of Reclomotion
Geologicol Survey
Notionol Pork Service

PUBLIC AND PRIVATE UTILITIES

Chelon County P.U.D.
Pocific Power ond Light Compony
Puget Sound Power and Light Compony
Woshington Woter Power Compony

OTHER PUBLIC AGENCIES

Okanogon Irrigotion District
Wenotchee Heights Irrigotion District

MUNICIPALITIES

City of Tocomo
City of Seottle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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COOPERATIVE SNOW SURVEYS

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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
JUNE 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are olso included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PHOTO A- 12-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201

WATER SUPPLY OUTLOOK

State of Washington
June 1, 1974

*** * * *

RESERVOIRS

All major reservoirs are being managed for flood control purposes and so current capacities have little meaning. They are all expected to fill on schedule. The Bureau of Reclamation reports that Franklin D. Roosevelt Reservoir will fill early in July and the five Yakima reservoirs will fill during the last half of June.

STREAMFLOW

During May, streamflow varied from a low of 11 percent below normal for the Chelan River to a high of 94 percent above normal for the Walla Walla. If the drainage area for a stream is generally from the higher elevations, the flow was low; if from a lower elevation watershed, the flow was high.

PRECIPITATION

In direct contrast to streamflow, the rainfall in the Southeastern portion of the state was 26 percent below normal during May. All other drainage divisions, as reported by the National Weather Service, had above normal valley rainfall. This ranged from 3 percent above for the Columbia in Canada to 42 percent above for the Southwest slopes of the Cascades.

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (June) 1974	1973	1972	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	397.7	218.9	467.2	299.8
Columbia	Franklin D. Roosevelt Lake	5232.0	979.0	1808.5	1722.0	3239.1
Columbia	Banks Lake	761.8	204.9	112.2	381.3	446.7
Okanogan	Conconully Reservoir	13.0	11.5	10.4	12.1	10.4
Okanogan	Salmon Lake	10.5	10.5	10.1	10.5	9.3
Chelan	Lake Chelan	676.1	390.0	436.7	481.3	481.4
		YAKIMA				
Yakima	Keechelus Lake	157.8	114.1	122.9	138.2	147.5
Kachess	Kachess Lake	239.0	196.8	173.1	209.8	226.2
Cle Elum	Lake Cle Elum	436.9	301.5	337.2	319.1	387.3
Bumping	Bumping Lake	33.7	16.6	27.8	31.0	27.7
Tieton	Rimrock Lake	198.0	148.4	131.8	129.3	172.0
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	808.8	1056.3	1315.6	708.6
Skagit	Diablo Reservoir	90.6	86.8	87.9	88.9	84.8
Skagit	Gorge Reservoir	9.8	8.9	8.1	8.7	-

1/ Based on Active Storage

* 15-Year Average 1958-72

PRECIPITATION 1/

Division Averages and Departures

rainage Divisions	FALL Sept-Oct Observed	1973 2/ Departure	WINTER Nov.-1973--Mar.-1974 Observed	Departure	SPRING April-May 1974 2/ Observed	Departure
olumbia in Canada	5.14	+ 0.67	15.91	+ 3.16	3.68	+ 0.45
end Oreille - Spokane	4.28	- 0.20	32.17	+13.42	4.90	+ 0.49
ortheastern Washington	3.36	- 0.58	17.93	+ 6.82	3.27	+ 0.01
outheastern Washington	3.71	+ 0.48	20.99	+ 7.52	4.55	+ 0.89
entral Washington	4.68	- 0.07	36.60	+ 9.07	4.16	+ 0.85
orth Central Washington	3.44	+ 1.82	9.48	+ 2.76	2.22	+ 0.33
orthwest Slope Cascades	11.53	- 1.16	71.63	+19.40	10.90	+ 0.78
outhwest Slope Cascades	9.69	+ 1.01	57.29	+15.65	9.54	[illegible]

ortheastern Washington - Lower Spokane, Colville, Sanpoil and Lo[illegible] Kettle Drainages.

outheastern Washington - Touchet, Tucannon and Palouse Drainages.

entral Washington - Yakima, Wenatchee and Chelan Drainages.

orth Central Washington - Methow and Okanogan Drainages.

orthwest Slope Cascades - Puget Sound Drainages.

outhwest Slope Cascades - Lower Columbia Drainages.

/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service

/ - Departure from 15-year (1958-72) drainage division average.

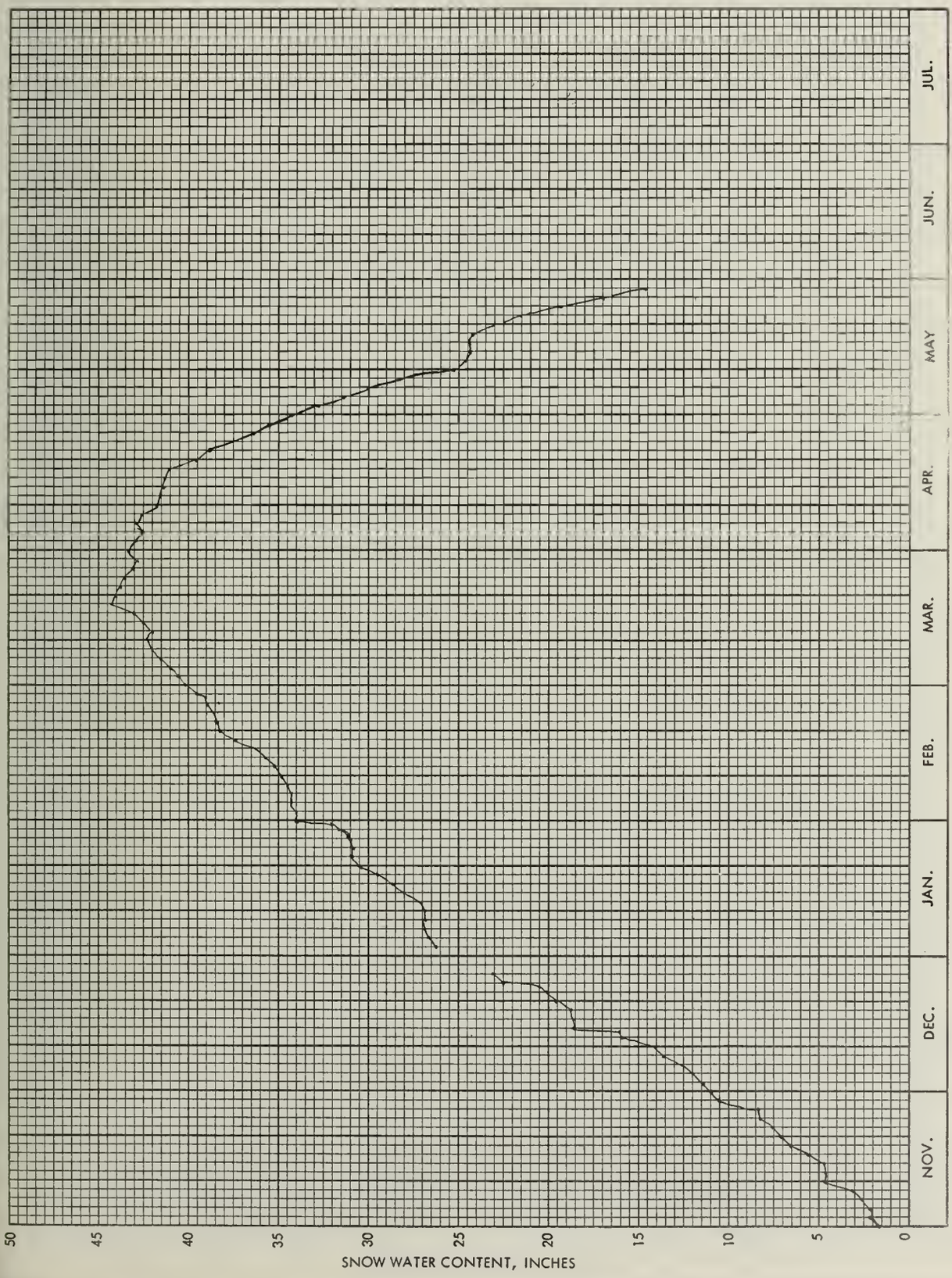
BERNE-MILL CREEK

SNOW PILLOW DATA

AS OF JUNE 1, 1974

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee River

Lat. 47° 45' Long. 121° 42' Elev. 3240'



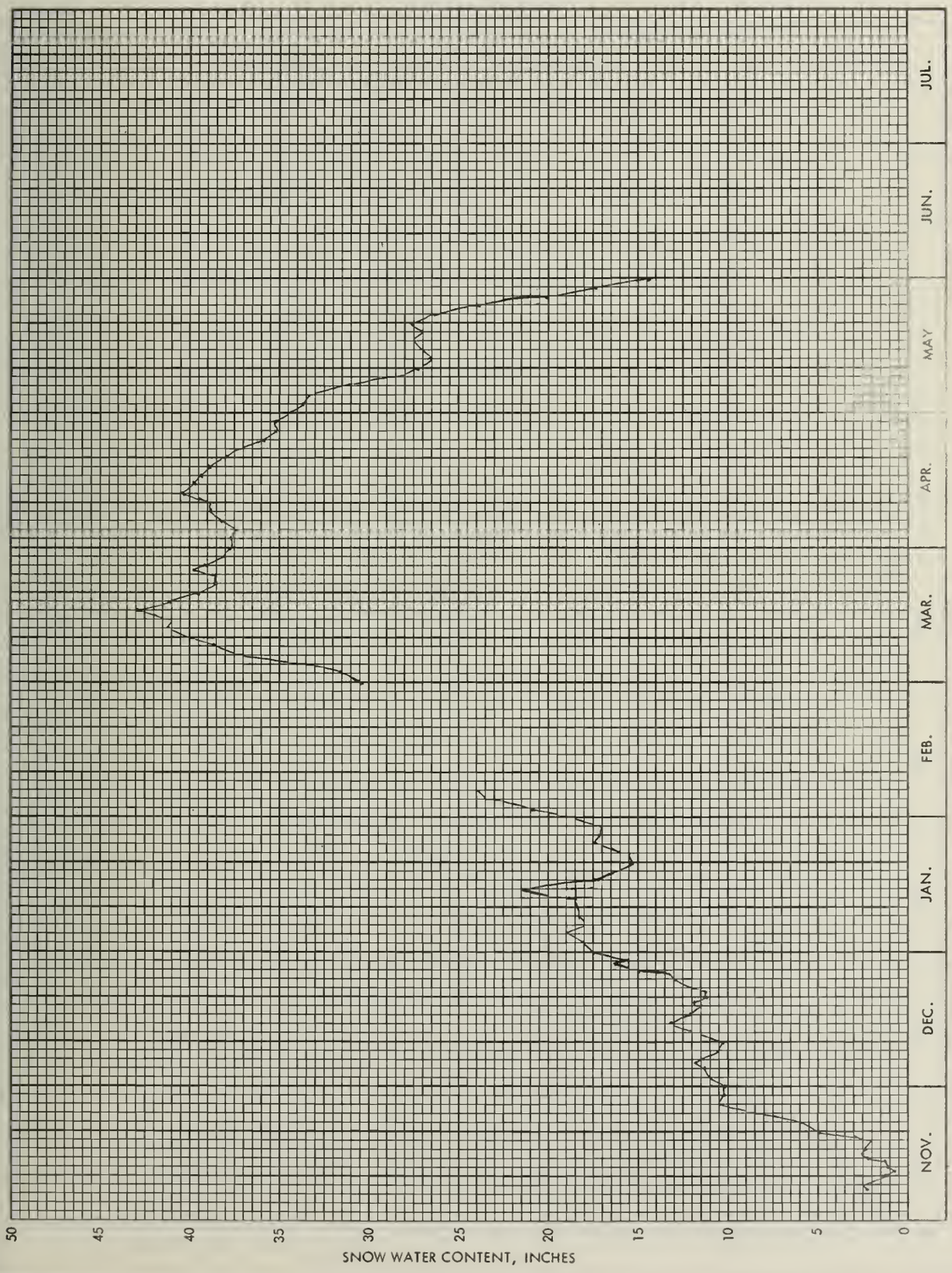
COUGAR MOUNTAIN - FS

SNOW PILLOW DATA

JUNE 1, 1974

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 120° 40' Elev. 3200'



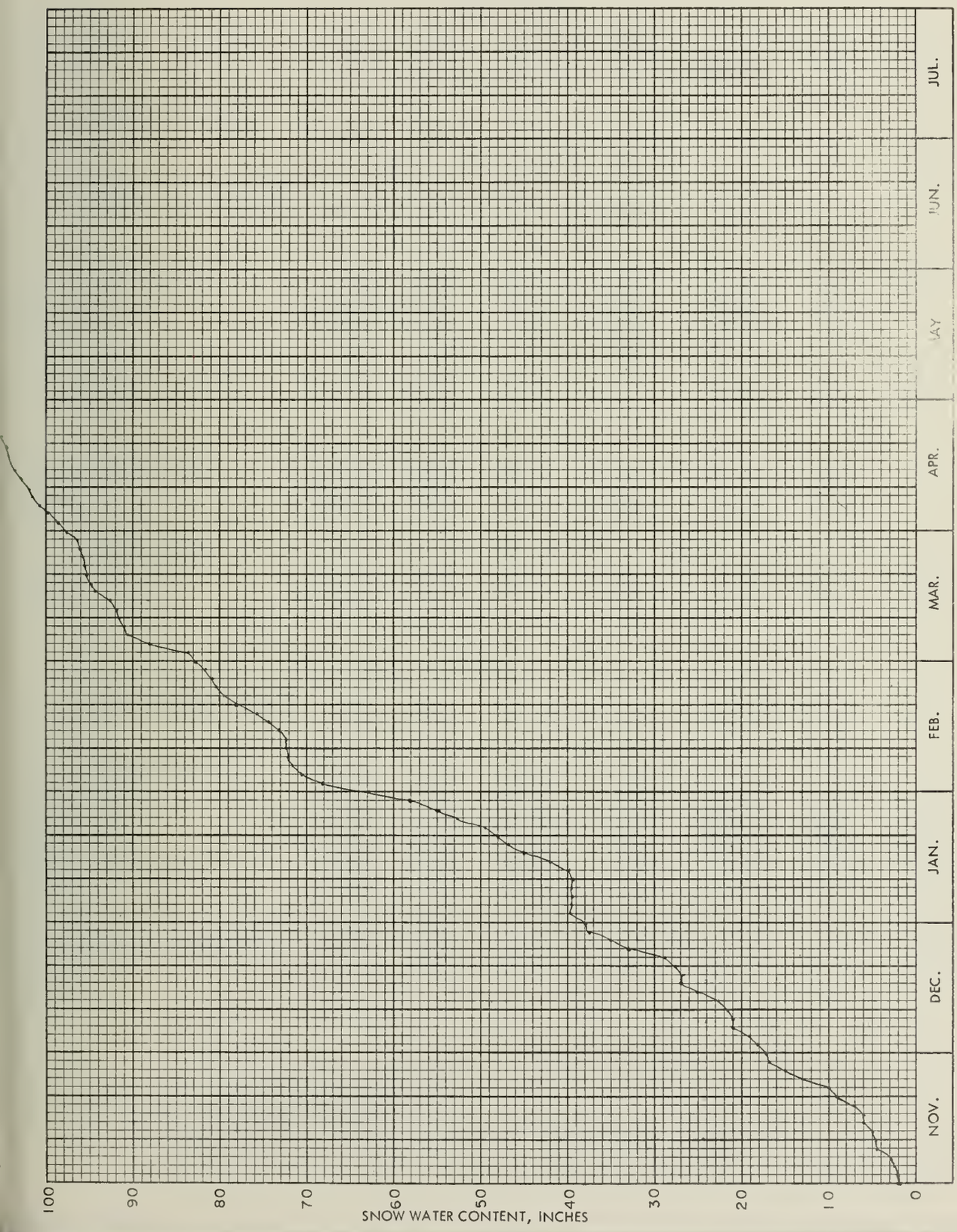
SNOWSHOE BUTTE - PS

SNOW PILLOW DATA

AS OF JUNE 1, 1974

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Lang. 121° 22' Elev. 5000'



WSFB-X4-L

APPENDIX 1
CORRECTIONS AND ADDITIONS - 1974 SNOW REPORTS

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average #
February 1							
KETTLE RIVER							
Old Glory Mountain	42-Can	7000	1/27	97	34.2	19.5	19.0*
OKANOGAN RIVER							
Isontok Lake	152-Can	5510	1/26	34	8.7	4.0	6.2*
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	2/5	136	43.5	22.2	29.0
YAKIMA RIVER							
Olallie Meadows	21B02	3625	2/6	167	65.1	14.6	32.7
Van Epps Pass +	20B26a	5925	2/7	170	51.0	19.2	-
Waptus Lake +	21B49a	3024	2/7	123	36.9	15.8	-
COWLITZ RIVER							
Potato Hill	21C14	4500	2/5	110	34.6	11.5	23.7
GREEN RIVER							
Cougar Mountain	21B42SP	3200	2/6	69	24.6	6.2	-
Snowshoe Butte	21B43SP	5000	2/6	176	72.0	27.2	-
BAKER RIVER							
Watson Lakes	21A08A	4500	2/5	192	77.0	37.0	42.9
March 1							
PEND OREILLE RIVER							
Lookout	15B02	5250	2/26	130	43.7	17.8	32.7
SPOKANE RIVER							
Above Burke	15B08	4100	2/26	91	27.0	8.6	-
Copper Ridge	16B02	4800	2/28	125	45.1	11.1	25.7
Lookout	15B02	5250	2/26	130	43.7	17.8	32.7
Lower Sands Creek	16B01	3400	2/26	84	26.8	7.4	17.5
Roland Summit	15B05A	5200	3/7	166	54.1	22.4	31.3
CHELAN LAKE BASIN							
Little Meadows +	20A24a	5275	3/2	156	56.2	32.6	39.9

\# Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973.

WSFB-X4-L

APPENDIX 2
CORRECTIONS AND ADDITIONS - 1974 SNOW REPORTS

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
			March 1 (Cont.)				
YAKIMA RIVER							
Bumping Lake	21C08	3450	3/1	79	26.0	7.7	15.3
Corral Pass	21B13	6000	3/7	156	52.0	22.2	34.5
Olallie Meadows	21B02	3625	3/7	214	81.8	15.0	40.6
WHITE RIVER							
Corral Pass	21B13	6000	3/7	156	52.0	22.2	34.5
GREEN RIVER							
Snowshoe Butte SP	21B43SP	5000	3/7	222	88.8	29.0	-
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	3/7	214	81.8	15.0	40.6
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	3/7	62	22.0	8.0	13.0
Beaver Pass	21A01	3680	3/7	135	45.5	16.7	28.3
			April 1				
OKANOGAN RIVER							
New Copper Mountain	46A-Can	4300	3/27	21	6.4	3.8	5.3*
YAKIMA RIVER							
Green Lake	21C10	6000	4/2	120	46.8	23.0	36.2
AHTANUM CREEK							
Green Lake	21C10	6000	4/2	120	46.8	23.0	36.2
BAKER RIVER							
Dock Butte	21A11A	3800	3/18	246	103.0	-	74.3
Easy Pass	21A07A	5200	3/18	272	101.0	-	79.1
Jasper Pass	21A06A	5400	3/18	292	122.0	-	83.5
Marten Lake	21A09A	3600	3/7	264	100.0	45.6	67.6
			3/18	268	112.0	-	72.0
Mount Blum +	21A18a	5800	3/18	188	79.0	-	-
Rocky Creek	21A12A	2100	3/18	124	52.0	-	28.7
Schriebers Meadow	21A10A	3400	3/18	191	80.0	-	57.3
S. F. Thunder Creek	21A14A	2200	3/18	46	19.0	-	9.4
Watson Lakes	21A08A	4500	3/18	230	97.0	-	61.1

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS PORTLAND OREGON 1973.

WSFB-X4-L

APPENDIX 3
CORRECTIONS AND ADDITIONS - 1974 SNOW REPORTS

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #/
			May 1				
PEND OREILLE RIVER							
Schweitzer Bowl	16A06	4500	4/30	87	42.2	12.7	26.6
YAKIMA RIVER							
Olallie Meadows	21B02	3625	4/17	179	91.3	19.2	48.4
			4/29	173	91.8	18.2	48.6
White Pass (E. Side)	21C28	4500	4/29	96	45.3	-	25.9
LEWIS RIVER							
White Pass (E. Side)	21C28	4500	4/29	96	45.3	-	25.9
GREEN RIVER							
Cougar Mountain SP	21B42SP	3200	4/29	52	26.0	0.0	-
Snowshoe Butte	21B43SP	5000	4/8	194	89.2	38.2	-
BAKER RIVER							
Baker Pass	21A27a	4900	5/4	288	135.0	70.2	-
Mt. Blum	21A18a	5800	5/4	206	97.0	63.9	-
Panorama New	21A26	4300	Delete **				
NOOKSACK RIVER							
Panorama New	21A26	4300	Delete **				
ELWHA							
Hurricane	23B03	4500	5/4	77	31.1	13.8	26.9

Average based on 1958-72 average

USDA-SCS-PORTLAND OREGON 1973

WSFB-X4-L

APPENDIX A

SNOW DATA TO JUNE 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	5/16	132	65.4	22.0	42.6
Baree Midway	15B16	4600	5/16	85	43.2	8.0	24.5
Baree Trail	15B15	3800	5/16	0	0.0	0.0	0.0
Heart Lake Trail	14C10	4800	5/16	53	24.6	0.0	10.2
			5/31	24	11.9	-	1.7
Hoodoo Basin	15C10	6000	5/16	156	76.2	29.1	48.8
			5/31	116	62.6	15.8	34.9
Hoodoo Creek	15C01	5900	5/16	147	72.3	28.0	45.5
			5/31	119	63.6	15.0	33.5
Lookout	15B02	5250	5/31	72	34.2	0.0	-
Nelson	19-Can	3050	5/13	7	2.9	0.0	0.8*
			5/30	0	0.0	0.0	0.0*
Schweitzer Bowl	16A06	4500	5/31	43	21.3	0.0	-
Schweitzer Ridge	16A05	6100	5/31	120	58.8	19.2	-
KETTLE RIVER							
Big White Mountain	154-Can	5500	5/14	63	29.6	13.6	17.8*
			5/30	52	25.9	3.2	8.8*
Carmi	126-Can	4100	5/14	0	0.0	0.0	0.0*
Farron # 1	17-Can	4000	5/13	16	6.6	-	-
Graystoke Lake	5-Can	5950	5/15	76	29.2	16.8	21.1*
			6/1	Not Measured		8.2	15.4*
Monashee Pass	48A-Can	4500	5/14	29	12.1	5.4	9.4*
			5/31	17	7.5	0.0	2.0*
Old Glory Mountain	42-Can	7000	5/12	98	48.1	25.9	29.1*
			6/2	83	46.1	14.0	17.3*
Trapping Creek Lower	166-Can	3050	5/14	0	0.0	0.0	0.0*
Trapping Creek Upper	165-Can	4450	5/14	5	1.1	0.0	0.5*
SPOKANE RIVER							
Granite Peak	15B13A	6000	6/4	105	45.0	10.1	-
Lookout	15B02	5250	5/31	72	34.2	0.0	-
Lost Lake	15B14A	6000	6/4	194	83.6	13.1	-
Medicine Ridge	15B04A	6150	6/4	118	52.6	10.6	-
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	5/15	0	0.0	-	0.1*
Blackwall Peak	100-Can	6250	5/16	105	50.2	24.5	37.6*
			5/29	91	49.2	12.4	29.1*
Bouleau Lake	234-Can	4580	6/1	Not Measured		0.0	1.5*

Average based on 1958-72 average

* Average for years of record

USDA-SCS-PORTLAND, OREGON 1973.

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APPENDIX 5
SNOW DATA TO JUNE 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Brenda Mine	193-Can	4800	5/14	12	5.1	0.0	2.9*
			5/27	0	0.0	0.0	0.0*
Brookmere	27-Can	3200	5/15	2	0.6	0.0	2.9*
Enderby	130-Can	6250	5/13	142	59.0	41.3	45.2*
			5/31	130	56.0	31.6	40.0*
Esperon Creek Lower	164-Can	4400	5/14	19	7.5	-	2.5*
			5/30	5	2.4	-	0.0*
Esperon Creek Middle	163-Can	4700	5/14	31	13.2	-	4.9*
			5/30	10	4.5	-	0.0*
Esperon Creek Upper	162-Can	5400	5/14	59	24.6	-	9.8*
			5/30	39	19.3	-	5.9*
Graystoke Lake	5-Can	5950	5/16	76	29.2	16.8	21.1*
			6/1	Not Measured		8.2	15.4*
Hamilton Hill	107-Can	4900	5/14	27	10.7	0.0	6.5*
			5/29	0	0.0	0.0	2.0*
Isintok Lake	152-Can	5510	5/11	26	10.2	3.8	4.8*
			5/29	17	7.0	-	-
Lost Horse Mountain	105-Can	6300	5/16	45	15.6	4.4	10.3*
			6/1	Not Measured		-	4.2*
McCulloch	4-Can	4200	5/14	1	0.2	0.0	0.6*
Missezula Mountain	106-Can	5100	5/13	22	7.2	0.0	1.9*
			5/28	0	0.0	0.0	0.0*
Mission Creek	5A-Can	6000	5/15	81	30.9	17.2	19.1*
			5/29	62	29.4	8.8	11.4*
Monashee Pass	48A-Can	4500	5/14	29	12.1	5.4	9.4*
			5/31	17	7.5	0.0	2.0*
Mount Kobau	156-Can	5950	5/15	46	20.2	4.2	10.0*
			5/30	38	19.2	0.0	2.0*
New Penticton Res. #2	183-Can	5225	5/15	33	10.0	2.0	7.3*
			5/31	16	6.1	0.0	0.0*
Nickel Plate Mtn.	47-Can	6200	5/14	39	13.5	-	7.3*
Postill Lake	55-Can	4500	5/14	13	4.1	-	4.6*
Quartette Lake			6/1	Not Measured			
Silver Star Mountain	99-Can	6050	5/12	84	41.4	23.4	26.0*
			6/1	72	38.6	12.5	15.5*
Summerland Reservoir	3A-Can	4200	5/12	7	2.9	0.0	2.3*
			5/29	0	0.0	-	-
Trout Creek	3-Can	4700	5/12	13	4.4	0.0	1.7*
Vaseux Creek	233-Can	4600	5/14	4	0.8	0.0	0.5*
White Rocks Mountain	70-Can	6000	5/14	82	37.8	15.9	20.8*
			5/30	64	33.4	2.8	-

\# Average based on 1958-72 average
* Average for years of record

USDA-SCS-PORTLAND, OREGON 1973-

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APPENDIX 6
SNOW DATA TO JUNE 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
ENTIAT RIVER							
Entiat Meadows +	20A33a	4800	5/15	Not Measured		15.0	-
			5/29	84	46.6	-	-
Four Mile Ridge +	20B27a	7000	5/15	Not Measured		12.0	-
			5/29	80	44.4	-	-
Fox Camp +	20A36a	6510	5/15	Not Measured		32.0	-
			5/29	152	84.4	-	-
Blue Creek G. S.	20B28a	5425	5/15	Not Measured		14.0	-
			5/29	84	46.6	-	-
Pope Ridge	20B20	4300	5/15	Not Measured		-	1.4
Pugh Ridge +	20A32a	6400	5/15	Not Measured		17.0	30.4
			5/29	93	51.6	-	-
Shady Pass	20A37	6200	5/15	Not Measured		-	-
			5/30	59	32.7	-	-
Snow Brushy +	20A35a	3850	5/15	Not Measured		0.0	19.9
			5/29	45	25.0	-	-
Tommy Creek +	20B21a	5300	5/15	Not Measured		0.0	9.7
			5/29	28	15.5	-	-
WENATCHEE RIVER							
Stevens Pass	21B01	4070	5/15	157	77.2	25.1	48.3
			5/29	132	70.1	9.4	36.5
Stevens Pass Sand Shed	21B45	3700	5/15	110	53.4	4.3	-
			5/29	80	40.8	0.0	-
YAKIMA RIVER							
Bumping Lake	21C08	3450	5/15	24	9.8	-	1.8
			5/30	0	0.0	-	-
Bumping Lake New	21C36	3400	5/15	36	17.6	-	-
			5/30	0	0.0	-	-
Joe Lake +	21B46a	4624	5/31	Marker Not Visible			-
Lake Cle Elum	21B14M	2200	5/15	0	0.0	-	-
Lemah Creek +	21B47a	3327	5/31	99	51.8	-	-
Stampede Pass SP	21B10	3860	5/16	149	68.6	10.4	-
			5/30	114	70.4	0.0	-
Tunnel Avenue	21B08	2450	5/15	41	17.9	-	7.9
			5/31	11	5.7	-	-
Van Epps Pass +	20B26a	5925	5/31	128	65.5	-	-
Waptus Lake +	21B49a	3024	5/31	51	26.7	-	-
White Pass (E. Side)	21C28	4500	5/16	84	38.1	-	21.2
			5/30	66	34.6	-	13.6
Olallie Meadows	21B02	3625	5/31	179	84.4	-	-
Snowshoe Butte SP	21B43SP	5000	5/31	182	96.0	-	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973.

WSFB-X4-L

APPENDIX 7
SNOW DATA TO JUNE 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (Inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COWLITZ RIVER							
White Pass (E. Side)	21C28	4500	5/16	84	38.1	-	21.2
			5/30	66	34.6	-	13.6
GREEN RIVER							
Stampede Pass SP	21B10	3860	5/16	149	68.6	10.4	33.6
			5/30	114	70.4	0.0	18.8
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	5/15	157	77.2	25.1	48.3
			5/29	132	70.1	9.4	36.5
Stevens Pass Sand Shed	21B45	3700	5/15	110	53.4	4.3	-
			5/29	80	40.8	0.0	-
BAKER RIVER							
Baker Pass +	21A27a	4900	5/17	290	159.0	-	-
Dock Butte	21A11A	3800	5/17	200	110.0	44.0	72.7
			6/1	Late Report		34.0	58.0
Easy Pass	21A07A	5200	5/17	256	141.0	63.0	90.2
			6/1	Late Report		55.0	73.6
Jasper Pass	21A06A	5400	5/17	283	155.0	67.0	114.7
			6/1	Late Report		63.0	84.2
Komo Kulshan	21A17	800	6/1	Late Report		-	-
Marten Lake	21A09A	3600	5/17	241	132.0	55.0	81.3
			6/1	Late Report		40.0	66.2
Mount Blum +	21A18a	5800	5/17	212	116.0	63.0	-
			6/1	Late Report		65.0	-
Rocky Creek	21A12A	2100	5/17	56	31.0	0.0	12.1
			6/1	Late Report		0.0	-
Schreibers Meadow	21A10A	3400	5/17	176	97.0	39.0	61.7
			6/1	Late Report		13.0	48.6
S. F. Thunder Creek	21A14A	2200	5/17	0	0.0	0.0	0.0
			6/1	Late Report		0.0	-
Watson Lakes	21A08A	4500	5/17	196	108.0	-	73.5
			6/1	Late Report		36.0	61.4

USDA-SCS-PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
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COOPERATIVE SNOW SURVEYS

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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
FEB. 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO [illegible]-P48D-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS-PORTLAND, OREG 1974

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

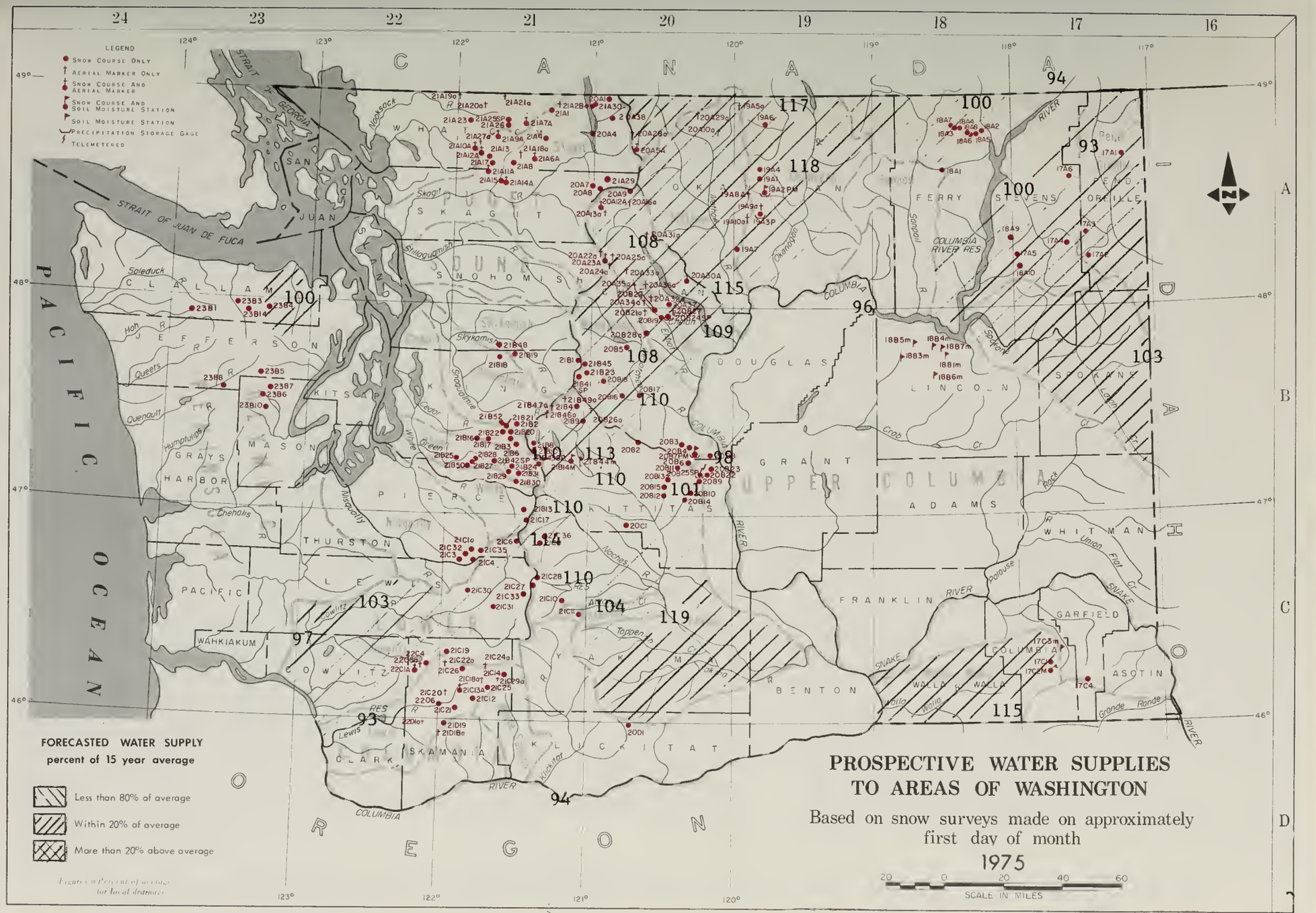
JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1975
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
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CANADA
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	1BA3	2B	39N	35E	4070
Cabin Creek	1BA8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	3BN	36E	2150
Snow Caps Trail	18A6	5	3BN	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2B85
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	1BA10	6	29N	3BE	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Billy Goat Pass	20A10a	10	38N	20E	6400
Oollar Watch	20A29a	B	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	B	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6S00

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B1B	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700

Wenatchee River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Trough #2	20B25SF	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	2B	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	1BB7m	24	27N	33E	2440
Wheatridge	1BB6m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	34S0
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	1S	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	53B5
High Creek	20B12	34	20N	19E	293C
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	1SE	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Satus Pass	2001	21	6N	17E	4030

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Blue Lake	21C22a	19	9N	8E	4B00
Bob's Trail	21C21	2S	BN	7E	2200
Calamity Ridge	2201a	B	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Oivide Meadow	21C29a	21	9N	10E	560C
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	200C
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	BN	7E	3400
Surprise Lakes	21C13A	14	7N	BE	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21018a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Corral Pass	21B13	30	18N	11E	6000

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	BE	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3B60
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21BS2	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Alpine Meadow	21B4B	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Oevils Park	20A4	34	3BN	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Baker Pass	21A27a	1	37N	7E	4900
Oock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	3BN	8E	3600
Mount Blum	21A1Ba	27	3BN	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Oeer Park	23B4	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cox Valley	23B14	31	29N	6W	4500

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Hurricane	23B3	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900

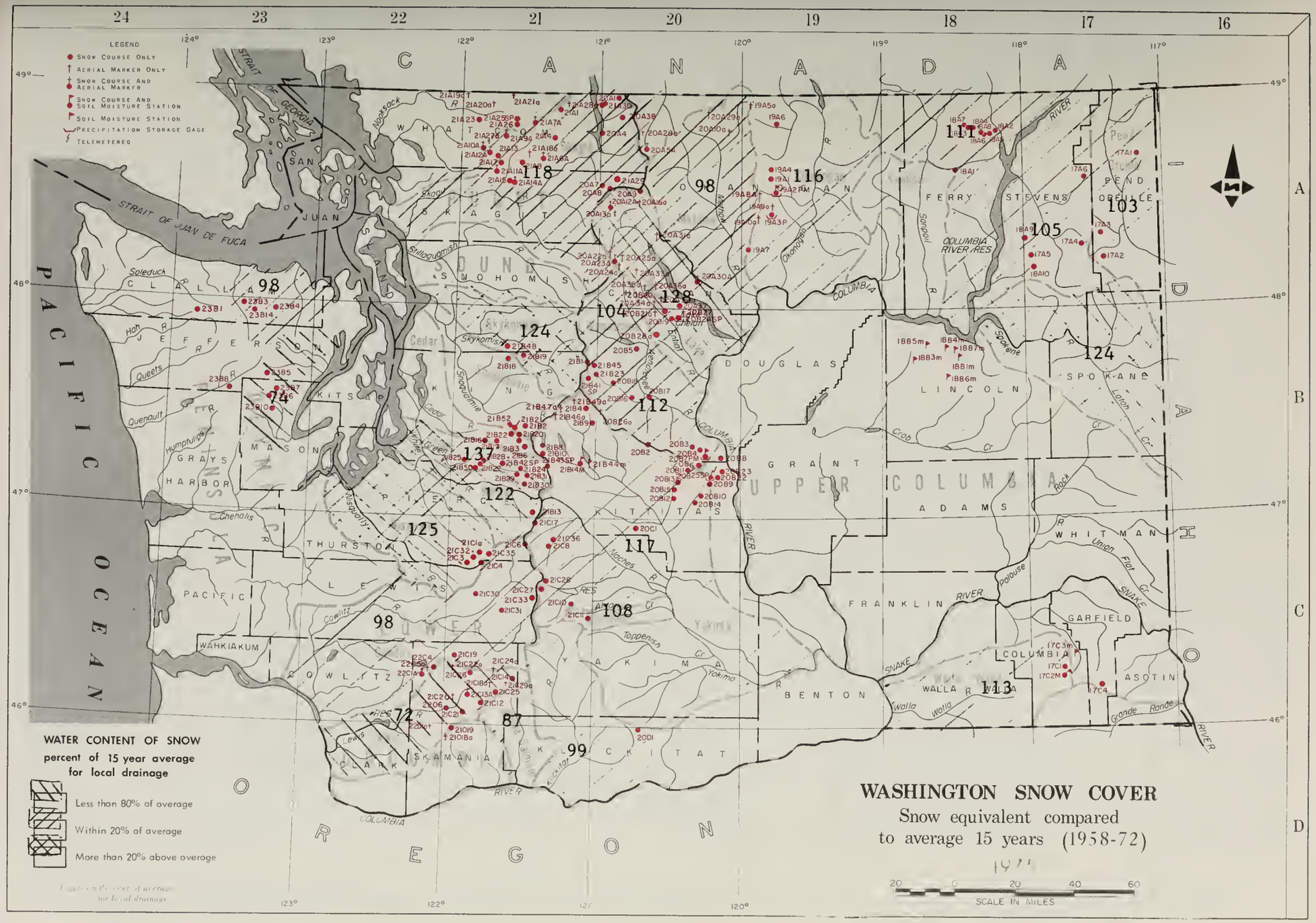
Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Oeer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
SCALE IN MILES
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
KING
KITSAP
MASON
GRAYS HARBOR
JEFFERSON
CLALLAM
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
CHELAN
DOUGLAS
GRANT
BENTON
FRANKLIN
ADAMS
LINCOLN
SPOKANE
FERRY
STEVENS
PEND OREILLE
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
8oyer Mountain	17A2	7	31N	43E	5250
8unchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
8oulder Road	18A2	36	39N	36E	1450
8utte Creek	18A3	28	39N	35E	4070
Cabin Creek	18AB	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
8aird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
8illy Goat Pass	20A10a	10	38N	20E	6400
0ollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
8lue Creek G.S.	20B28a	19	28N	18E	5425
8rief	20819	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20827a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20820	22	29N	18E	4300
Pope Ridge Snow Pillow	20824SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow 8rushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
8erne-Mill Creek	21B23	7	26N	15E	3170
8erne-Mill Creek (New)	21B41SP	13	26N	14E	3240
8lewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20816	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20817	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	2181	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700

Wenatchee River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Colockum Creek Upper	20822	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Creston-Kunz	1881m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	1884m	21	27N	33E	2420
Sheffels	1885m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	1886m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ahtanum R. S.	21C11	24	12N	14E	3100
8ig Boulder Creek	2189	35	23N	14E	3200
8umping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	2089	25	20N	20E	5370
Cooke Creek	20810	17	19N	20E	4123
Domery Flat	21844m	15	20N	14E	2200
Fish Lake	2184	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20812	34	20N	19E	2930
Joe Lake	21846a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21847a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20813	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	218B	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20815	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Spruce Springs	17C4	9	8N	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Satus Pass	20D1	21	6N	17E	4030

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21018a	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Dhanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Corral Pass	21B13	30	18N	11E	6000

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21825	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21828	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21831	5	19N	11E	4700
Snowshoe Butte	21843SP	14	20N	11E	5000
Stampede Pass	21810	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
City Cabin	2183	10	21N	10E	2390
Mt. Gardner	21821	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21816	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21820	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	2182	19	22N	11E	3625
South Fork Tolt	21818	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
8eaver Creek Trail	21A4	35	39N	12E	2200
8eaver Pass	21A1	9	39N	12E	3680
Brown Top	21A2Ba	26	40N	12E	6000
0evils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder 8asin	21A30	10	35N	14E	4200

Boker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
8aker Pass	21A27a	1	37N	7E	4900
0ock 8utte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount 8lum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
8ald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A255P	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Park	2384	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23814	31	29N	6W	4500

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	23B3	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
8lack and White	23B7	17	24N	5W	4200
8lack and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900

Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
0eer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLES

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow

WATER SUPPLY OUTLOOK

State of Washington
February 1, 1975

* * * *

RESERVOIRS

Generally speaking, the amount of water stored in reservoirs, as of February 1, is above average with a few exceptions. The major power reservoirs have above normal amounts of water stored and irrigation reservoirs, normal or above amounts. The result will be adequate storage for later drafting if weather conditions remain normal and no excessive cold spells occur.

PRECIPITATION

During the September through October period, the National Weather Service reports extreme drouth conditions in all watersheds in Washington and its tributary basins. These deficits range from 90 percent below normal to 71 percent below. During the period November through January this deficit was generally made up, resulting in above normal precipitation except in the Northcentral Drainage Division. January precipitation, itself, was above normal with the exception of the Columbia Drainage in Canada and the northeastern portion of the state. These areas were 2 percent below and 20 percent below, respectively. The other drainage divisions range from 13 percent above in the Pend Oreille-Spokane Drainage to 54 percent above in the southeastern area.

STREAMFLOW

During January, streamflow, as measured by the United States Geological Survey, ranged from 44 percent below normal for the Spokane River to 56 percent above for the Walla Walla. The main stem of the Columbia had generally below normal flows with the greater flows along the Cascades and some Pacific Drainages in the west. Forecasts of streamflow are for normal or near normal flows during the forth coming runoff season. Percentagewise, these flows range from a low of 10 percent below normal for the April-June flows of the Columbia River at Birchbank to a high of 21 percent above normal for the April-July flows of the Yakima River near Parker. These flow figures are quite preliminary as there is still several months of winter yet to come and, as has occurred in the past, the existing conditions of snow pack and winter rainfall can drastically change.

STREAMFLOW FORECASTS - FEBRUARY 1975

The following summarized runoff forecasts are based principally on mountain snow-cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1974 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Forecast period	1974	1973	1972	15-Yr Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
COLUMBIA BASIN							
Columbia River System							
Columbia River	43600	94	Apr-Sep	54227	34796	56680	46430
at Birchbank 1/	35100	94	Apr-Jul	44492	27876	46587	37548
	24800	90	Apr-Jun	31893	20203	34333	27549
Columbia River	66000	96	Apr-Sep	85139	45849	85860	68868
at Grand Coulee 1/	56000	96	Apr-Jul	73671	38193	73431	58379
	42500	92	Apr-Jun	57033	29886	57727	46060
Columbia River	73600	98	Apr-Sep	96939	49117	97430	75337
bl Rock Island Dam 1/	61000	95	Apr-Jul	84480	41200	84085	64192
	48000	95	Apr-Jun	65246	32032	66051	50604
Columbia River	98500	94	Apr-Sep	139724	65162	135452	104670
at The Dalles, Or 1/	82600	92	Apr-Jul	123569	54260	118552	89893
	67000	92	Apr-Jun	99282	43395	96933	73158
PEND OREILLE RIVER SYSTEM							
Pend Oreille River	14800	93	Apr-Sep		8311	20294	15953
bl. Box Canyon	13600	93	Apr-Jul		7614	18724	14688
	11600	91	Apr-Jun		6756	16109	12777
KETTLE RIVER SYSTEM							
Kettle River							
nr. Laurier	1870	100	Apr-Sep	2854	1121	2289	1873
	1790	100	Apr-Jul	2780	1093	2205	1793
	1620	99	Apr-Jun	2514	1020	1965	1640

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Fore-cast Period	1974	1973	1972	15-Yr. Average 58-72
	Seasonal Streamflow in Thousands of Acre-Fee						
Kettle River System (Cont.)							
Colville River							
at Kettle Falls	148	100	Apr-Sep		54	114	148
	137	100	Apr-Jul		50	103	137
	125	98	Apr-Jun		48	94	128
Spokane River System*							
Spokane River	3100	103	Apr-Sep			4002	3120
at Post Falls, ID 2/	3000	103	Apr-Jul			3875	2899
	2800	101	Apr-Jun			3644	2773
Okanogan River System							
Similkameen River	1770	117	Apr-Sep	2276	736	3259	1517
nr. Nighthawk	1650	116	Apr-Jul	2151	697	3090	1424
	1460	119	Apr-Jun	1729	621	2568	1222
Okanogan River	2030	118	Apr-Sep	2718	765	3852	1723
nr. Tonasket	1840	116	Apr-Jul	2491	707	3523	1582
	1580	117	Apr-Jun	1985	622	2895	1349
Methow River System							
Methow River							
nr. Pateros	1180	115	Apr-Sep		512	1959	1031
	1100	114	Apr-Jul		476	1819	963
	950	114	Apr-Jun		417	1524	832
Chelan River System							
Chelan River	1370	109	Apr-Sep	1343	777	1866	1253
at Chelan 3/	1230	111	Apr-Jul	1054	680	1619	1112
	980	111	Apr-Jun	658	544	1250	881
Stehekin River	975	108	Apr-Sep		541	1235	904
at Stehekin	850	110	Apr-Jul		447	1044	776
	675	112	Apr-Jun		352	772	600
Entiat							
nr. Ardenvoir	Not Forecast		Apr-Sep		145	398	239
	as of		Apr-Jul		131	361	220
	February 1		Apr-Jun		113	283	180

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

Basin, Stream and Station	Forecast Runoff 1975	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg	Fore-cast Period	1974	1973	1972	15-Yr. Average 1958-72
Wenatchee River System							
Wenatchee River	1420	108	Apr-Sep		790	1926	1312
at Plain	1300	110	Apr-Jul		709	1686	1187
	1050	110	Apr-Jun		589	1272	956
Wenatchee River	1960	110	Apr-Sep	2633	1033	2787	1786
at Peshastin	1800	110	Apr-Jul	2297	938	2464	1629
	1480	112	Apr-Jun	1670	786	1883	1324
Stemilt Basin	140*	101	May-Sep			145*	138*
nr Wenatchee							
Yakima River System							
Yakima River	156	110	Apr-Sep	251	83	220	142
nr. Martin 4/	145	110	Apr-Jul	180	76	198	131
	130	112	Apr-Jun	134	70	167	116
Yakima River	1060	110	Apr-Sep		555	1515	965
at Cle Elum 5/	1000	114	Apr-Jul		489	1374	877
	870	114	Apr-Jun		433	1156	764
Yakima River	2060	119	Apr-Sep		582	3231	1730
nr. Parker 6/	2050	121	Apr-Jul		590	3071	1701
	1900	120	Apr-Jun		598	2694	1580
Kachess River	142	114	Apr-Sep	245	66	195	125
nr. Easton 7/	135	114	Apr-Jul	92	63	182	118
	122	115	Apr-Jun	42	59	153	106
Cle Elum River	540	113	Apr-Sep	649	285	747	477
nr Roslyn 8/	500	114	Apr-Jul	444	255	670	437
	430	116	Apr-Jun	293	220	537	372

* Thousands of Miners' inches.

4/ Observed flow corrected for storage in Lake Keechelus.

5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

7/ Observed flow corrected for storage in Lake Kachess.

8/ Observed flow corrected for storage in Lake Cle Elum.

Basin, Stream and Station	Forecast Runoff 1975	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr. Average 1958-72
Yakima River System (Cont.)							
Bumping River	165	114	Apr-Sep	225	74	228	146
nr. Nile 9/	155	116	Apr-Jul	178	68	203	134
	130	116	Apr-Jun	126	61	155	112
American River	140	110	Apr-Sep		70	186	128
nr. Nile	130	110	Apr-Jul		65	169	118
	110	110	Apr-Jun		58	137	100
Tieton River	270	110	Apr-Sep	405	160	407	247
at Tieton Dam 10/	235	111	Apr-Jul	337	124	342	211
	190	110	Apr-Jun	255	99	267	172
Naches River	980	110	Apr-Sep	436	442	1477	889
nr. Naches 11/	900	111	Apr-Jul	293	385	1339	810
	780	112	Apr-Jun	207	336	1106	698
Ahtanum Creek	50	104	Apr-Sep		21	75	48
nr. Tampico 12/	45	102	Apr-Jul		18	69	44
	42	107	Apr-Jun		16	59	39
Lower Columbia River System							
Mill Creek							
nr. Walla Walla	31	115	Apr-Sep		17	34	27
	27	112	Apr-Jul		13	29	24
	24	114	Apr-Jun		11	26	21
Lewis River	1260	93	Apr-Sep	1872	800	1597	1342
at Ariel 13/	1100	94	Apr-Jul	1684	666	1392	1174
	980	93	Apr-Jun	1420	574	1236	1052
Cowlitz River	2170	103	Apr-Sep		1252	3048	2106
Blw. Mayfield Dam	1920	104	Apr-Jul		1068	2672	1846
	1640	104	Apr-Jun		904	2201	1578
Cowlitz River	2700	97	Apr-Sep	4296	1676	3819	2768
at Castle Rock 14/	2400	99	Apr-Jul	3850	1419	3331	2416
	2030	97	Apr-Jun	3158	1212	2782	2083

9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (Combined)
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

Basin, Stream and Station	Forecast Runoff 1975	Seasonal % 15-Yr. Avg	Streamflow in Thousands of Acre-Feet Forecast Period	1974	1973	1972	15-Yr. Average 1958-72
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	165	100	Apr-Sep		120	207	165
nr. Sequim	135	99	Apr-Jul		98	171	137
	105	101	Apr-Jun		74	127	104

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about February 1, 1975, as percent of the same date in 1974 and 1973 and average of record.

Tributary Basin	No. of Courses Average	1975 Snow Water Expressed as percent of 1974	1973	1958-72 Avg.
UPPER COLUMBIA BASIN				
Pend Oreille	10	79	149	103
Kettle	16	102	203	111
Colville	5	78	171	105
Spokane	3	102	222	124
Okanogan	42	87	189	116
Methow	10	64	143	98
Chelan	7	84	153	128
Entiat	10	78	136	104
Wenatchee	9	88	211	112
Yakima	23	82	210	117
Ahtanum	2	97	173	108
LOWER COLUMBIA				
Mill Creek	3	65	492	113
Klickitat	1	72	277	99
White Salmon	2	56	315	87
Lewis	17	57	175	72
Cowlitz	10	72	234	98
PUGET SOUND				
Nisqually	4	76	253	125
White	2	70	160	122
Green	8	99	381	137
Skykomish	2	95	169	124
Skagit	14	75	173	118
Nooksack	2	87	176	-
OLYMPIC PENINSULA				
Skokomish	4	59	112	74
Elwha	1	-	139	98

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (February) 1975	1974	1973	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	63.8	386.0	153.3	138.4
Columbia	Franklin D. Roosevelt Lake	5232.0	4844.6	730.6	4937.1	3766.0
Columbia	Banks Lake	761.8	714.9	720.3	610.7	566.9
Okanogan	Conconully Reservoir	13.0	10.6	5.6	10.8	10.8
Okanogan	Salmon Lake	10.5	9.2	7.3	9.5	7.6
Chelan	Lake Chelan	676.1	242.9	297.7	237.1	295.9
		YAKIMA				
Yakima	Keechelus Lake	157.8	127.8	87.3	98.6	96.1
Kachess	Kachess Lake	239.0	142.4	93.6	193.0	175.7
Cle Elum	Lake Cle Elum	436.9	338.2	168.7	315.9	232.9
Bumping	Bumping Lake	33.7	5.3	10.8	6.7	8.3
Tieton	Rimrock Lake	198.0	136.3	112.0	143.1	110.6
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	1094.5	1231.4	997.3	582.1
Skagit	Diablo Reservoir	90.6	84.9	85.2	83.4	84.4
Skagit	Gorge Reservoir	9.8	8.2	7.6	8.2	-

1/ Based on Active Storage

* 15-year Average 1958-72

SOIL MOISTURE - FEBRUARY

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Feb. 1 1975	1974	1973
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	2.0	3.7	2.4
Trout Creek	3-M	3600	48	7.3	3.2	3.0	3.4
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	-	5.0	6.6
Lake Cle Elum	21B14M	2200	48	12.8	-	9.2	6.9
WALLA WALLA							
Couse	17C3m	3650	48	11.1	10.2	10.1	7.3
Helmers	17C2M	4400	48	12.0	8.8	9.8	10.7
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	8.6	11.3	8.9

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1974	1973	1972
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	1.8	2.6	2.8
Trout Creek	3-M	3600	48	7.3	3.0	2.8	3.3
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	-	2.6	4.1
Lake Cle Elum	21B14M	2200	48	12.8	-	6.1	8.7
WALLA WALLA							
Couse	17C3m	3650	48	11.1	-	5.6	6.0
Helmers	17C2M	4400	48	12.0	-	7.6	7.7
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	5.4	6.0	5.7

PRECIPITATION 1/

DIVISION AVERAGES AND DEPARTURES

Drainage Divisions	FALL Sept-Oct Average	1974 2/ Departure	WINTER Nov-Dec 1974 Average	Jan 1975 2/ Departure
Columbia in Canada	1.22	-3.25	9.61	+0.40
Pend Oreille - Spokane	0.71	-3.77	14.52	+1.59
Northeastern Washington	0.30	-2.48	9.45	+1.56
Southeastern Washington	0.31	-2.92	9.38	+0.41
Central Washington	1.21	-3.54	22.61	+2.58
North Central Washington	0.37	-1.25	4.71	-0.21
Northwest Slope Cascades	3.25	-9.44	42.89	+7.07
Southwest Slope Cascades	2.49	-6.19	33.35	+4.44

Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse drainages.
Central Washington	- Yakima, Wenatchee and Chelan drainages.
North Central Washington	- Methow and Okanogan drainages.
Northwest Slope Cascades	- Puget Sound drainages.
Southwest Slope Cascades	- Lower Columbia drainages.

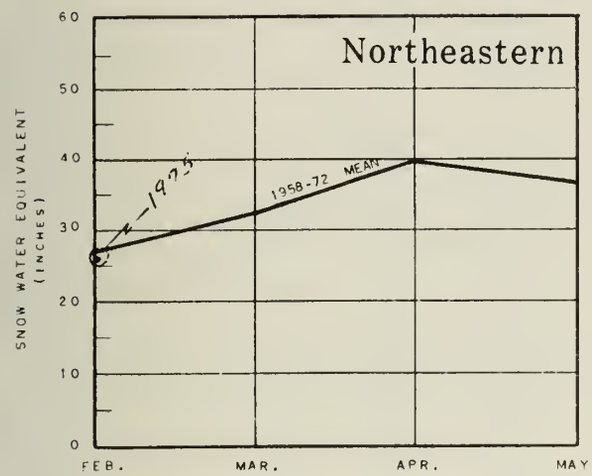
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

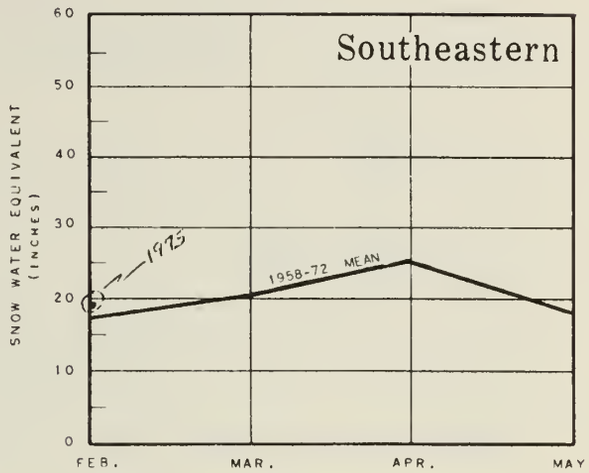
2/ - Departure from 15-year (1958-72) drainage division average.

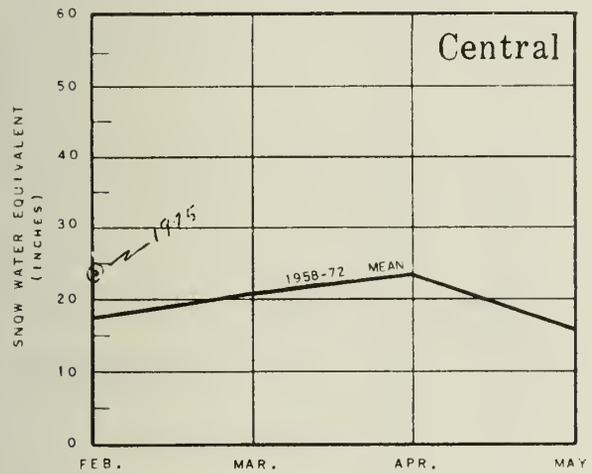
WASHINGTON SNOW COVER

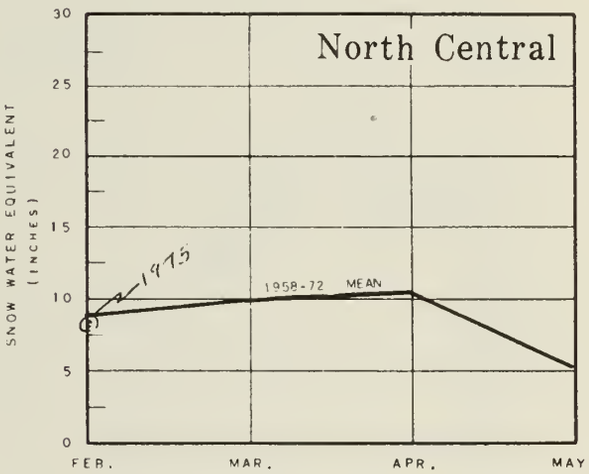
1975

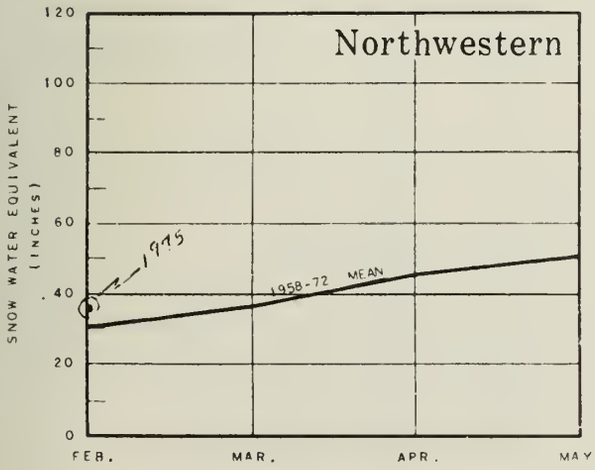
DRAINAGE AREAS

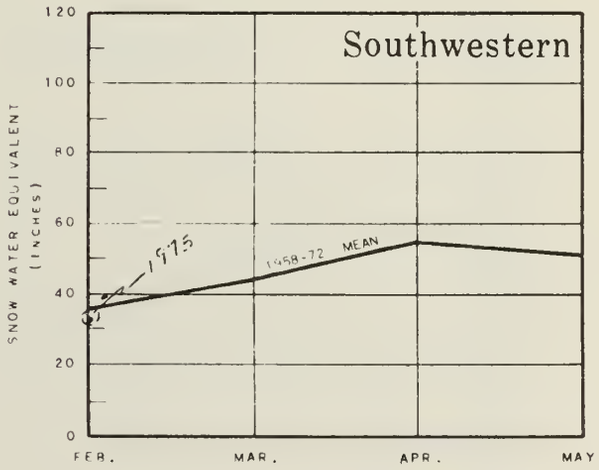










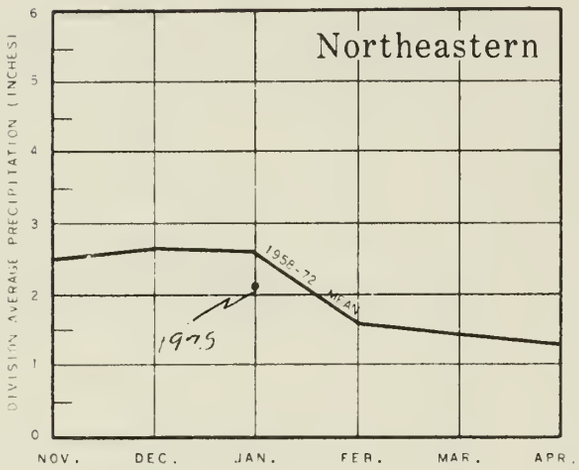


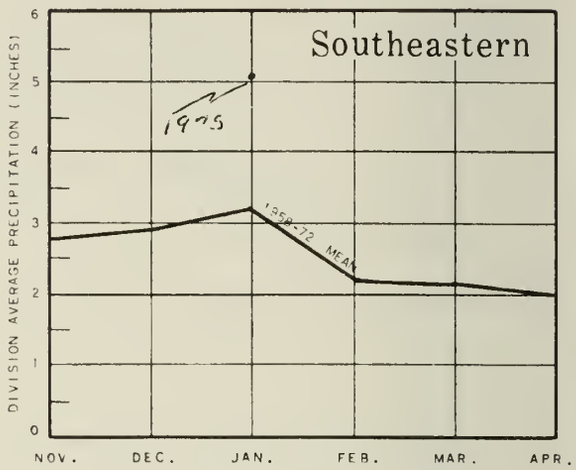
Selected Snow Survey Courses by Soil Conservation Service

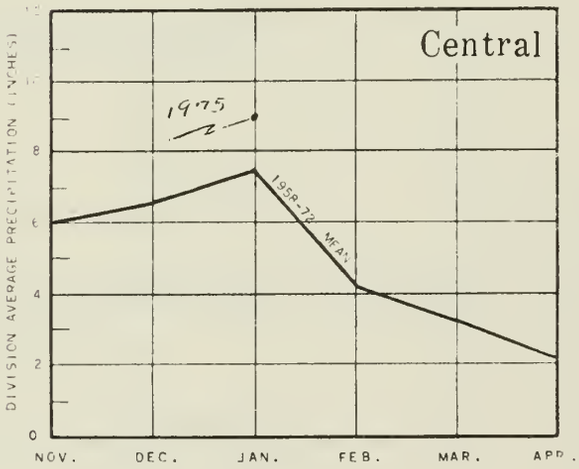
WASHINGTON VALLEY PRECIPITATION

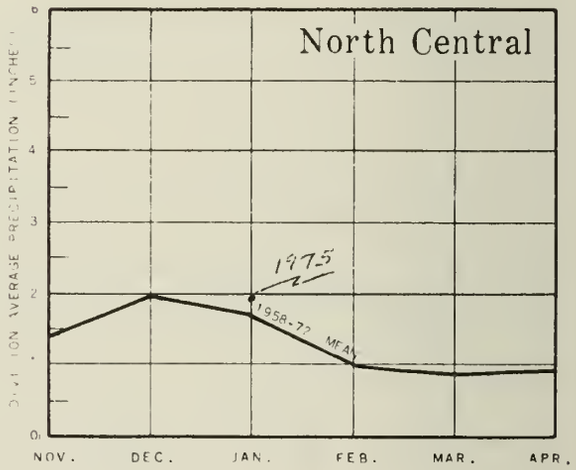
1975

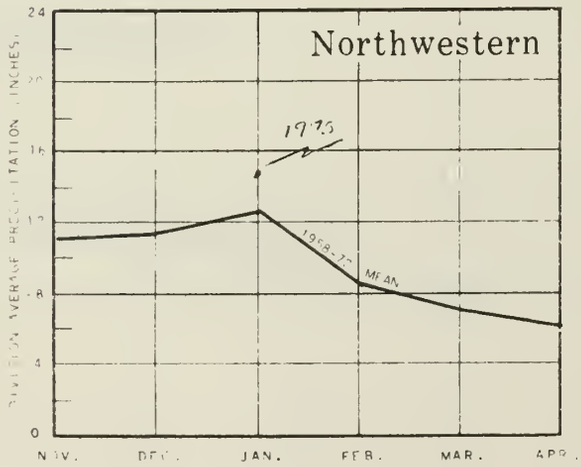
DRAINAGE AREAS

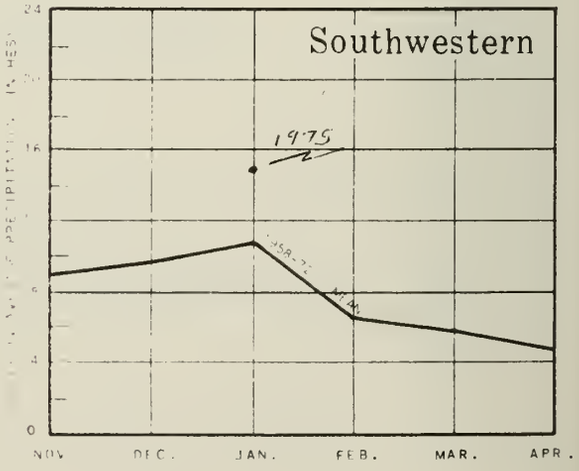






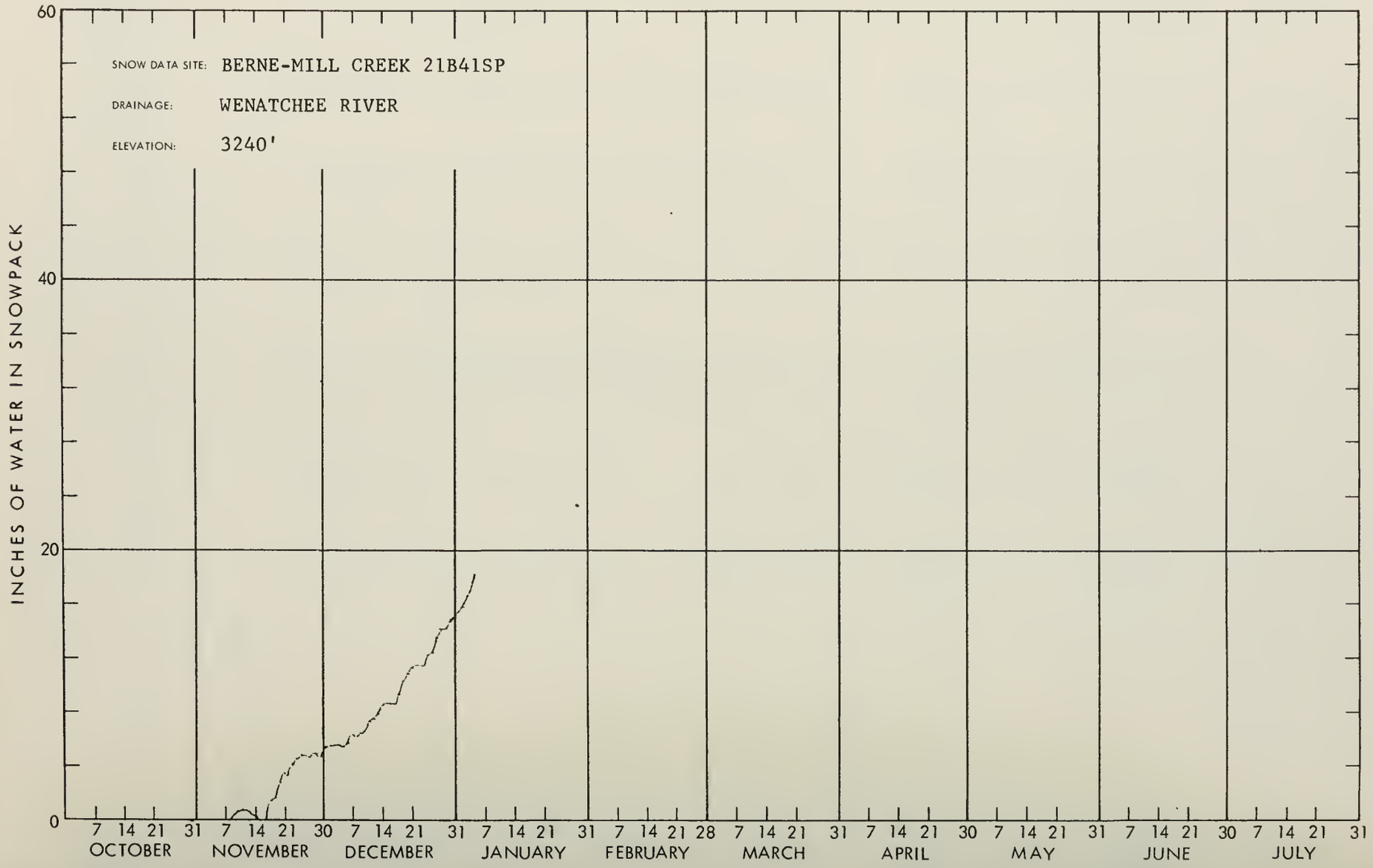






Preliminary Analysis by National Weather Service

WSFB-X13C


SNOW DATA SITE: BERNE-MILL CREEK 21B41SP
DRAINAGE: WENATCHEE RIVER
ELEVATION: 3240'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Benton Meadow	16A02	2344	12/30	15	1.9	3.0	3.5
			1/27	23	5.3	1.8	6.0
Benton Spring	16A03	4900	1/3	36	9.3	14.3	8.4
			1/27	49	14.8	20.1	13.8
Chewelah	17A04	4925	2/1	45	11.7	17.2	13.0
Heart Lake Trail	14C10	4800	12/27	40	8.3	11.7	8.7
			1/28	61	16.9	19.1	17.6
Hoodoo Basin	15C10	6000	12/27	66	17.0	30.0	20.8
			1/28	108	34.6	46.0	37.9
Hoodoo Creek	15C01	5900	12/27	63	13.9	24.9	18.9
			1/28	103	31.3	41.9	35.5
Lookout	15B02	5250	12/30	54	13.6	18.1	15.6
			1/31	82	26.0	32.0	26.7
Nelson	19-Can	3050	11/18	15	1.6	1.2	-
			11/29	14	2.8	5.4	-
			12/13	20	3.6	9.9	-
			12/30	44	7.7	13.4	7.4*
			1/30	50	13.0	15.7	11.3*
Schweitzer Bowl	16A06	4500	12/31	61	16.6	24.8	-
			1/30	80	27.1	32.5	22.6
Schweitzer Ridge	16A05	6100	12/31	93	30.2	34.8	-
			1/30	123	43.2	53.5	32.1
Winchester Creek	17A03	2970	1/29	34	8.4	10.4	9.7
KETTLE RIVER							
Barnes Creek	90-Can	5300	1/30	55	15.9	15.1	14.1*
Big White Mtn.	154-Can	5500	1/29	61	17.8	19.0	13.8*
Boulder Road	18A02	1450	12/31	13	2.4	-	2.7
			1/30	17	4.1	2.0	4.6
Butte Creek	18A03	4070	12/31	22	4.8	-	4.7
			1/30	31	7.8	8.7	7.4
Cabin Creek	18A08	3170	12/31	22	4.4	-	4.4
			1/30	28	6.8	7.6	6.5
Carmi	126-Can	4100	1/29	31	7.7	6.2	5.3*
Farron # 1	17-Can	4000	1/30	40	9.9	13.9	9.6*
Farron # 2	243-Can	4000	1/30	39	10.1	12.9	New
Goat Creek	18A04	3595	12/31	19	3.9	-	4.1
			1/30	26	5.9	6.7	6.2

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
KETTLE RIVER (Cont.)							
Monashee Pass	48A-Can	4500	12/31	32	8.0	6.6	-
			1/30	42	11.0	9.3	9.6*
Old Glory Mountain	42-Can	7000	1/30	73	25.5	34.2	19.0*
Snow Caps Creek	18A05	2150	12/31	12	2.2	-	3.0
			1/30	17	2.1	4.2	4.8
Snow Caps Trail	18A06	2720	12/31	17	3.2	-	3.5
			1/30	21	4.6	4.6	5.5
Summit G. S.	18A07	4600	12/31	21	4.5	-	3.8
			1/30	30	7.2	7.6	5.9
Trapping Creek Lower	166-Can	3050	1/29	32	6.5	4.8	4.4*
Trapping Creek Upper	165-Can	4450	1/29	42	9.8	8.5	7.4*
COLVILLE RIVER							
Baird	17A6	3215	1/29	31	6.6	7.4	6.1
Carlson	18A9	2885	2/2	26	5.6	0.7	4.5
Chewelah	17A4	4925	2/1	45	11.7	17.2	13.0
Stranger Mountain	17A5	4990	2/1	42	10.4	16.5	11.0
Togo	18A10	3370	2/2	41	11.1	11.9	10.1
SPOKANE RIVER							
Above Burke	15B8	4100	1/2	37	9.7	9.8	-
			1/30	64	16.2	17.7	-
Copper Ridge	16B2	4800	1/2	38	9.2	-	-
Fourth of July Summit	16B3	3100	1/2	21	4.3	-	-
			1/30	45	9.8	7.3	6.8
Lookout	15B02	5250	12/30	54	13.6	18.1	15.6
			1/31	82	27.2	32.0	26.4
Sherwin	16C1	3200	12/30	29	5.6	10.0	-
			1/31	51	14.4	14.8	11.0
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	1/31	28	6.5	5.0	5.0*
Blackwall Peak	100-Can	6250	1/30	83	27.5	34.2	25.3*
Bouleau Lake	234-Can	4580	2/1	Not Measured		-	11.5*
Brenda Mine	193-Can	4800	12/27	35	8.0	-	-
			1/28	48	13.1	11.7	9.9*
Brookmere	27-Can	3200	1/29	33	7.1	7.6	7.2*

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Carrs Landing Upper	168-Can	3200	12/30	18	3.2	2.6	-
			1/28	26	6.6	2.6	3.8*
Clark +	19A8a	7000	1/30	60	16.8	21.6	-
Dollar Watch +	20A29a	7000	1/30	72	21.6	29.7	19.4
Enderby	130-Can	6250	1/29	93	24.7	32.2	25.0*
Freezeout Meadows New	20A38	5000	1/27	79	24.7	63.3	New
Graystoke Lake	5-Can	5950	2/1	Not Measured		-	-
Hamilton Hill	107-Can	4900	1/29	48	12.3	13.2	10.4*
Harts Pass	20A05A	6500	1/28	108	36.1	52.3	32.7
Horseshoe Basin +	19A05a	7000	1/30	43	12.9	17.1	9.7
Isontok Lake	152-Can	5510	12/27	21	4.5	6.0	4.0*
			2/1	32	8.2	8.7	6.2*
Lost Horse Mtn.	105-Can	6300	1/31	35	7.7	10.7	6.7*
Loup Loup	19A07	4650	1/31	30	6.8	12.4	7.6
McCulloch	4-Can	4200	12/29	22	4.4	4.6	3.2*
			1/26	35	7.4	6.4	4.8*
Missizula Mtn.	106-Can	5100	1/28	37	9.0	11.2	6.5*
Mission Creek	5A-Can	6000	12/27	46	10.9	12.4	8.9*
			1/27	58	17.0	19.1	13.6*
Monashee Pass	48A-Can	4500	12/31	32	8.0	6.6	-
			1/30	42	11.0	9.3	9.6*
Mount Kobau	156-Can	5950	1/30	35	8.4	14.7	10.6*
Muckamuck +	19A09a	6390	1/30	40	11.2	18.6	-
Mutton Creek No. 1	19A01	5700	1/31	36	10.3	18.5	10.4
Mutton Creek No. 2	19A04	6000	1/31	30	9.0	17.5	10.9
Mutton Creek No. 2 SP	19A11SP	6000	1/31	-	7.0	13.4	New
New Copper Mtn.	46A-Can	4300	1/27	23	4.2	7.2	5.5*
New Penticton Res. # 2	183-Can	5225	1/30	36	8.9	9.3	7.5*
Oyama Lake	203-Can	4400	1/30	31	6.3	7.6	5.5*
Paysayten +	20A28a	4300	1/30	50	15.0	20.4	13.0
Postill Lake	55-Can	4500	1/30	34	8.2	6.5	5.9*
Rusty Creek	19A03	4000	1/30	22	5.0	9.4	5.9
Salmon Meadows	19A02	4500	1/30	30	6.5	11.5	7.8
Silver Star Mountain	99-Can	6050	12/29	60	18.1	18.9	14.2*
			2/1	72	26.1	25.2	19.1*
Starvation Mountain +	19A10a	6750	1/30	46	12.9	21.0	-
Summerland Reservoir	3A-Can	4200	12/29	29	6.6	6.4	4.6*
			2/2	42	10.9	8.4	7.7*
Touts Coulee	19A06	2845	1/30	11	1.6	4.9	3.4
Trout Creek	3-Can	4700	1/30	34	8.5	7.0	5.2*
Vaseux Creek	233-Can	4600	1/2	18	2.9	4.6	-
			1/29	28	6.0	5.4	5.5*
White Rocks Mtn.	70-Can	6000	1/30	69	23.9	27.3	18.5*

Average based on 1958-72 Average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 4

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
METHOW RIVER							
Billy Goat Pass +	21A10a	6409	1/30	63	18.9	28.5	20.8
Dollar Watch +	20A29a	7000	1/30	72	21.6	29.7	19.4
Harts Pass	20A05A	6500	1/28	108	36.1	52.3	32.7
Horseshoe Basin +	19A05A	7000	1/30	43	12.9	17.1	9.7
Loup Loup	19A07	4650	1/31	30	6.8	12.4	7.6
Mutton Creek No. 1	19A01	5700	1/31	56	10.3	18.5	10.4
Mutton Creek No. 2	19A04	6000	1/31	30	9.0	17.5	10.9
Rusty Creek	19A03	4000	1/30	22	5.0	9.4	5.9
Salmon Meadows	19A02	4500	1/30	30	6.5	11.5	7.8
War Creek Pass +	20A31a	6500	1/30	117	35.1	44.1	-
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	1/30	116	40.6	43.5	29.0
Greenwood Flat +	20A25a	3540	2/1	Not Measured		28.8	23.3
Little Meadows +	20A24a	5275	1/30	98	34.3	42.6	32.2
Lyman Lake +	20A23A	5900	2/1	Not Measured		**	42.1
Park Creek Flat +	20A13a	2220	2/1	Not Measured		32.0	27.3
Park Creek Ridge	20A12A	4600	1/30	125	43.8	56.0	34.1
Petersons +	20A16a	3730	1/30	102	35.7	39.4	25.1
Rainy Pass	20A09	4780	1/28	102	35.6	45.6	29.5
Safety Harbor +	20A30A	6300	1/30	66	19.8	**	-
War Creek Pass +	20A31a	6500	1/30	117	35.1	44.1	-
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	1/29	108	35.6	37.0	-
Brief	20B19	1600	1/26	23	6.1	-	6.8
Entiat Meadows +	20A33a	4800	1/29	120	39.6	48.7	-
Entiat River Trail +	20A34a	3150	1/29	52	17.2	22.3	-
Four Mile Ridge +	20B27a	7000	1/29	84	27.7	40.3	-
Fox Camp +	20A36a	6510	1/29	128	42.2	51.0	-
Pope Ridge	20B20	4300	1/27	50	16.5	24.0	14.0
Pugh Ridge	20A32a	6400	1/29	79	26.1	35.6	-
Shady Pass	20A37	6200	1/28	76	25.2	-	-
Snow Brushy +	20A35a	3850	1/29	87	28.7	37.2	-
Tommy Creek +	20B21a	5300	1/29	64	21.1	26.3	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation
** Marker down or buried

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average#
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	11/27	24	5.4	10.2	4.1
			12/13	34	8.2	12.9	7.6
			12/31	60	15.3	19.8	11.2
			1/15	84	25.0	-	16.8
			1/29	68	27.4	29.3	21.4
Berne-Mill Creek New	21B41SP	3240	11/27	23	5.2	10.0	-
			12/31	58	14.7	23.6	9.9
			1/29	56	23.2	28.2	18.7
Blewett Pass No. 2	20B02	4270	12/30	31	8.1	13.4	6.7
			1/29	44	15.6	19.0	13.0
Chiwaukum G. S.	20B16	1810	11/15	Not Measured		1.4	0.2
			12/1	Not Measured		4.6	1.5
			12/13	13	2.5	6.1	3.2
			12/31	19	3.9	10.0	5.1
			1/15	40	8.7	-	7.8
			1/29	30	8.9	12.8	9.9
Lake Wenatchee	20B05	1970	11/15	Not Measured		1.1	0.3
			11/27	5	0.6	4.7	1.5
			12/13	14	2.6	6.3	3.9
			12/31	27	5.4	10.9	6.1
			1/15	54	12.1	13.9	9.6
			1/29	42	13.0	14.8	12.1
Leavenworth R. S.	20B17	1127	10/29	0	0.0	0.5	0.0
			11/15	0	0.0	1.0	0.0
			11/30	0	0.0	2.2	0.8
			12/13	5	1.0	3.0	1.8
			12/27	6	0.6	4.8	3.4
			1/15	25	5.8	6.8	4.7
			1/29	15	4.9	5.4	6.0
Merritt	20B18	2140	11/27	8	1.9	6.6	2.3
			12/13	17	3.8	8.4	4.9
			12/31	33	7.7	13.4	7.9
			1/15	66	15.8	16.2	11.7
			1/29	50	17.2	17.9	14.5
Stevens Pass	21B01	4070	11/14	12	2.4	3.6	3.6
			11/27	38	9.2	14.6	8.9
			12/13	59	15.1	25.4	14.7
			12/31	95	29.4	32.6	21.7
			1/15	137	41.9	37.9	29.0
			1/29	111	46.0	45.8	37.0
Stevens Pass Sand Shed	21B45	3700	11/27	27	6.0	11.0	-
			12/13	40	9.9	16.0	-
			12/31	69	18.2	23.9	-
			1/15	101	29.3	27.9	-
			1/29	78	29.5	33.2	-

Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	1/29	34	15.2	-	-
Colockum Creek Lower	20B23	4300	1/29	29	7.5	13.0	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	1/28	21	6.2	11.4	6.6
Scout-A-Vista	20B04	3400	1/28	28	7.0	12.2	6.5
STEMILT CREEK							
Jump-Off	20B08	4450	1/27	27	7.4	11.8	6.7
Stemilt Slide	20B06	5000	1/27	36	11.0	18.6	12.4
Upper Wheeler	20B07	4400	1/27	28	8.6	15.6	8.3
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	12/27	10	2.6	5.8	3.1
			1/28	28	6.8	10.2	6.3
Blewett Pass No. 2	20B02	4270	12/30	31	8.1	13.4	6.7
			1/29	44	15.6	19.0	13.0
Bumping Lake Old	21C08	3450	12/17	15	3.4	9.1	4.0
			12/31	27	5.9	14.4	7.1
			1/15	48	11.9	16.8	10.4
			1/31	44	13.1	20.2	13.2
Bumping Lake New	21C36	3400	12/17	21	5.2	10.8	5.8
			12/31	38	8.7	16.9	8.7
			1/15	60	15.2	18.8	13.0
			1/31	55	18.2	24.0	18.3
Cayuse Pass	21C06	5300	12/30	126	37.8	-	33.2
			1/27	176	60.5	86.4	58.7
Colockum Pass	20B09	5370	1/28	44	13.6	17.6	11.2
Cooke Creek	20B10	4123	1/28	25	6.2	8.2	7.2
Grouse Camp	20B11	5385	1/29	46	13.8	19.9	12.1
High Creek	20B12	2930	1/29	25	5.9	7.0	4.9
Joe Lake +	21B46a	4624	1/27	150	45.0	-	-
Green Lake	21C10	6000	1/28	88	31.8	25.2	-
Lake Cle Elum	21B14M	2200	11/1	0	0.0	0.9	-
			11/14	0	0.0	1.6	-
			12/3	2	0.6	3.6	1.1
			12/17	5	0.8	4.4	2.2
			1/3	26	4.6	9.0	4.2
			1/15	44	10.6	10.7	6.5
			1/30	30	10.3	10.4	8.2

Average based on 1958-72 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 7

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average +
YAKIMA RIVER (Cont.)							
Lemah Creek +	21B47a	3327	1/27	102	32.6	39.6	-
Manashtash	20C01	3935	1/27	20	4.9	6.2	3.9
Morse Lake	21C17	5400	1/28	134	55.6	-	39.4
Nanum	20B13	3875	1/29	32	9.8	10.1	7.8
Olallie Meadows	21B02	3625	2/1	Late Report		65.1	32.7
Satus Pass	20D01	4030	1/30	26	8.6	12.0	8.7
Stampede Pass SP	21B10	3860	12/2	-	8.8	17.8	6.3
			12/16	-	15.1	23.4	11.9
			1/2	Not Measured		35.6	16.5
			1/18	-	44.1	39.4	22.0
			2/3	-	46.8	60.6	28.7
Trail Creek	20B14	3360	1/28	17	3.8	3.7	2.3
Tunnel Avenue	21B08	2450	11/1	0	0.0	1.0	-
			11/14	0	0.0	3.9	0.0
			12/2	15	3.0	8.5	2.7
			12/16	21	5.8	10.5	6.4
			12/31	79	10.6	18.8	9.2
			1/16	74	24.3	19.8	11.3
			1/29	65	23.9	26.3	17.6
Van Epps Pass +	20B26a	5925	1/27	127	38.1	51.0	-
Walters Flat	20B15	3360	1/29	26	7.2	9.6	6.3
Waptus Lake +	21B49a	3024	1/27	111	36.6	36.9	-
White Pass (E. Side)	21C28	4500	12/16	23	5.5	11.5	6.3
			12/30	37	9.6	19.6	9.6
			1/16	65	18.9	21.3	14.0
			1/30	58	20.9	27.7	18.2
White Pass (L. Lake)	21C27	4500	12/31	42	12.9	23.1	11.8
			1/28	69	23.4	32.6	22.0
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	12/27	10	2.6	5.8	3.1
			1/28	28	6.8	10.2	6.3
Green Lake	21C10	6000	1/28	88	31.8	25.2	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average#
LOWER COLUMBIA DRAINAGE							
ASOTIN CREEK							
Spruce Springs	17C04	5700	1/30	64	20.1	26.7	19.3
MILL CREEK							
Homestead	17C01	4030	1/29	26	7.1	10.9	6.5
Martin Springs	17C02	4400	1/29	38	11.2	15.6	9.8
Tollgate	18D3M	5070	1/28	60	19.6	33.6	16.7
KLICKITAT RIVER							
Satus Pass	20D01	4030	1/30	26	8.6	12.0	8.7
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	12/28	48	14.7	35.1	17.8
			1/27	79	27.1	49.4	32.5
Surprise Lakes	21C13A	4250	12/28	54	16.5	37.2	20.1
			1/27	92	32.7	58.7	35.9
WIND RIVER							
Old Man Pass	21D19	3100	12/28	12	3.0	15.8	7.5
			1/28	29	9.9	19.3	14.7
LEWIS RIVER							
Blue Lake +	21C22a	4800	12/27	90	27.9	55.1	34.5
			1/27	138	51.1	77.8	60.5
Bob's Trail	21C21	2200	12/27	14	2.9	12.4	6.5
			1/28	27	9.6	15.9	12.0
Calamity Ridge +	22D01a	2500	12/28	10	2.5	3.2	3.9
			1/27	12	4.0	0.3	5.6
Council Pass +	21C18a	4200	12/27	60	18.6	32.6	18.6
			1/27	74	26.6	46.9	29.7
Cultus Creek	21C12	4000	12/28	48	14.7	35.1	17.8
			1/27	79	27.1	49.4	32.5
Divide Meadow	21C29a	5600	12/27	78	24.2	34.6	27.5
			1/27	120	43.2	53.9	42.3
Grand Meadow	21C25	3500	12/27	28	8.2	20.2	10.5
			1/27	57	17.4	30.0	19.4
Lone Pine Shelter	21C26	3800	12/31	44	11.6	32.6	17.0
			1/28	62	23.4	45.1	30.5

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 9

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
LEWIS RIVER (Cont.)							
Marble Mountain +	22C05a	3200	12/27	8	2.2	25.5	12.7
			1/27	23	8.7	37.0	28.7
Mosquito Meadows	21C19	4100	12/31	47	12.7	28.6	18.9
			1/28	68	24.7	41.3	32.1
New Muddy River	22C06	2000	12/27	4	1.1	7.4	6.4
			1/28	12	4.0	3.4	12.1
Old Man Pass	21D19	3100	12/28	12	3.0	15.8	7.5
			1/28	29	9.9	19.3	14.7
Plains of Abraham +	22C01a	4400	12/28	68	21.8	50.2	28.8
			1/27	84	31.1	61.6	45.2
Smith Creek Road	22C04	2100	12/27	9	2.2	14.4	9.5
			1/28	21	8.6	15.4	15.7
Spencer Meadow +	21C20a	3400	12/27	16	4.5	19.8	10.2
			1/28	32	11.2	30.2	17.9
Surprise Lakes	21C13A	4250	12/28	54	16.5	37.2	20.1
			1/27	92	32.7	58.7	35.9
Table Mountain +	21C24a	4200	12/27	60	18.6	38.4	21.4
			1/27	84	30.2	53.9	34.8
Timbered Peak +	21D18a	3000	12/28	12	3.1	13.9	8.0
			1/27	20	6.8	16.5	14.3
COWLITZ RIVER							
Cayuse Pass	21C06	5300	12/30	126	37.8	52.8	41.3
			1/27	176	60.5	86.4	58.7
Mosquito Meadows	21C19	4100	12/31	47	12.7	28.6	18.9
			1/28	68	24.7	41.3	32.1
Ohanapecosh	21C32	2200	12/31	25	6.8	10.0	4.9
			1/28	43	15.2	13.9	14.4
Packwood Lake	21C31	2870	12/31	18	4.0	8.4	4.7
			1/27	36	10.6	14.5	10.6
Pigtail Peak	21C33	5900	12/31	85	26.8	33.7	26.1
			1/28	135	48.2	60.5	46.7
Plains of Abraham +	22C01a	4400	12/28	68	21.8	50.2	28.8
			1/27	84	31.1	61.6	45.2
Potato Hill	21C14	4500	12/31	49	13.2	22.2	12.8
			1/28	68	23.0	34.6	23.7
White Pass (E. Side)	21C28	4500	12/16	23	5.5	11.5	6.3
			12/30	37	9.6	19.6	9.6
			1/15	65	18.9	21.3	14.0
			1/30	58	20.9	27.7	18.2
White Pass (L. Lake)	21C27	4500	12/31	42	12.9	23.1	11.8
			1/28	69	23.4	32.6	22.0
Willame Creek	21C30	3250	12/31	42	11.6	22.6	10.8
			1/27	68	22.9	34.4	22.3

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1971

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 10

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average#
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	12/30	73	20.6	29.7	13.6
			1/27	99	34.7	49.0	31.7
Longmire	21C03	2760	12/30	24	5.5	7.8	2.5
			1/27	36	12.7	17.2	8.3
New Paradise Park	21C35	5500	12/30	108	35.8	44.2	24.9
			1/27	152	59.2	76.0	50.2
Stem Glade	21C01	5050	12/30	110	32.4	40.7	24.9
			1/27	151	57.7	71.9	48.3
WHITE RIVER							
Cayuse Pass	21C06	5300	12/30	126	37.8	52.8	41.3
			1/27	176	60.5	86.4	58.7
Morse Lake	21C17	5400	1/28	134	55.6	-	39.4
GREEN RIVER							
Airstrip	21B24	1800	11/25	0	0.0	2.4	0.6
			12/28	11	2.0	2.5	2.5
			1/27	31	12.4	2.0	4.9
Charley Creek	21B25	1200	11/25	0	0.0	0.8	0.0
			12/28	11	2.0	0.6	1.6
			1/27	5	1.0	0.0	1.5
Cougar Mountain	21B42SP	3200	1/1	Late Report		15.2	-
			2/1	Late Report		24.6	-
Grass Mtn. No. 2	21B27	2900	11/25	2	0.6	9.2	2.9
			12/28	25	4.3	13.9	7.6
			1/27	39	12.2	26.2	15.3
Grass Mtn. No. 3	21B28	2100	11/25	0	0.0	3.1	0.7
			12/28	20	3.5	1.9	2.6
			1/27	27	8.0	2.8	5.3
Lester Creek	21B29	3100	11/25	12	3.1	9.1	3.4
			12/28	46	10.2	16.8	9.7
			1/27	68	22.8	28.8	17.8
Lynn Lake	21B50	4000	11/25	1	0.5	10.4	-
			12/28	32	7.5	16.2	-
			1/27	50	18.3	33.5	-
Sawmill Ridge	21B31	4700	11/25	22	5.4	10.8	7.0
			12/28	61	15.6	23.2	15.2
			1/27	96	33.0	43.8	28.6

Average based on 1958-72 average

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 11

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
GREEN RIVER (Cont.)							
Stampede Pass SP	21B10	3860	12/2	-	8.8	17.8	6.3
			12/16	-	15.1	23.4	11.9
			1/2	Not Measured		35.6	16.5
			1/18	-	44.1	39.4	22.0
			2/3	-	46.8	60.6	28.7
Twin Camp	21B30	4100	11/25	14	3.5	-	4.1
			12/28	48	10.7	17.8	11.3
			1/27	76	24.2	32.2	17.6
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	Late Report			65.1	32.7
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	11/11	12	2.4	3.6	3.6
			11/27	38	9.2	14.6	8.9
			12/13	59	15.1	25.4	14.7
			12/31	95	29.4	32.6	21.7
			1/15	137	41.9	37.9	29.0
			1/29	111	46.0	45.8	37.0
Stevens Pass Sand Shed	21B45	4070	11/27	27	6.0	11.0	-
			12/13	40	9.9	16.0	-
			12/31	69	18.2	23.9	-
			1/15	101	29.3	27.9	-
			1/29	78	29.5	33.2	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	1/28	37	14.9	16.4	-
Beaver Pass	21A01	3680	1/27	60	20.6	35.1	-
Brown Top Ridge +	21A28a	6000	1/27	132	46.2	74.4	-
Cloudy Pass +	20A22a	6500	1/30	116	40.6	43.5	29.0
Devils Park	20A04	5900	1/28	112	39.6	53.5	31.9
Freezeout Creek Trail	20A01	3500	1/27	32	10.6	15.6	-
Freezeout Meadows New	20A38	5000	1/27	79	24.7	63.3	-
Granite Creek	21A29A	3500	1/28	54	16.4	21.0	-
Harts Pass	20A05A	6500	1/28	108	36.1	52.3	32.7
Klesilkwa	35B-Can	3700	2/1	27	9.1	-	10.4*
Lyman Lake	20A23A	5900	2/1	Not Measured		**	42.1
Meadow Cabins	20A08	1900	1/28	21	7.1	5.6	-
New Hozomeen Lake	21A30	2800	1/27	30	9.0	16.7	-
New Tashme	26A-Can	2500	1/31	29	10.8	13.4	8.5
Rainy Pass	20A09	4780	1/28	102	35.6	45.6	29.5
Thunder Basin	20A07	4200	1/28	53	18.8	24.1	-

** Marker down or buried
# Average based on 1958-72 average
* Average for years of record
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 12

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
BAKER RIVER							
Baker Pass +	21A27a	4900	12/31	100	35.0	52.0	-
			1/27	132	53.0	101.0	-
Dock Butte +	21A11A	3800	12/31	90	32.0	39.0	-
			1/27	126	50.0	85.0	44.8
Easy Pass +	21A7A	5200	12/31	120	42.0	37.0	-
			1/27	152	61.0	86.0	53.9
Jasper Pass +	21A6A	5400	12/31	148	52.0	58.0	-
			1/27	180	72.0	108.0	65.7
Marten Lake	21A09A	3600	12/31	120	42.0	48.0	-
			1/27	145	58.0	82.0	52.2
Mt. Blum +	21A18a	5800	12/31	102	36.0	48.0	-
			1/27	134	54.0	77.0	42.5
Panorama New	21A26	4300	1/16	132	50.2	41.7	-
			1/31	121	51.2	62.0	-
Rocky Creek	21A12A	2100	12/31	47	16.0	19.0	-
			1/27	62	25.0	35.0	21.5
Schreibers Meadow	21A10A	3400	12/31	76	27.0	37.0	-
			1/27	86	34.0	77.0	39.9
S. F. Thunder Creek +	21A14A	2200	12/31	24	8.0	6.0	-
			1/27	38	15.0	13.0	7.4
Watson Lakes	21A08A	4500	12/31	97	34.0	40.0	-
			1/27	132	53.0	77.0	42.9
NOOKSACK RIVER							
Glacier Creek	21A23	3700	11/29	7	1.4	9.0	-
			1/6	42	10.4	8.2	-
			2/3	42	16.5	18.4	-
Panorama New	21A26	4300	1/16	132	50.2	41.7	-
			1/31	121	51.2	62.0	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1971

SNOW DATA TO FEBRUARY 1, 1975 - APPENDIX 13

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	1/29	74	27.5	40.8	-
ELWHA RIVER							
Hurricane	23B03	4500	1/28	50	16.3	-	16.7
SKOKOMISH RIVER							
Black & White	23B07	4200	12/27	47	12.5	29.2	16.9
			1/27	65	23.8	41.8	30.5
Black & White Lakes	23B06	4700	12/27	72	22.2	38.4	26.0
			1/27	86	36.6	55.0	43.9
Four Streams	23B10	3000	12/27	19	3.8	23.6	15.1
			1/27	36	13.2	29.6	24.7
Home Sweet Home	23B05	5200	12/28	88	29.2	46.3	36.2
			1/27	118	45.8	69.0	56.5

Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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MAR 27 1975

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
MAR. 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO 1'-P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS-PORTLAND, OREG 1974

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
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WASHINGTON, D C

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GALEN S. BRIDGE

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SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

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DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

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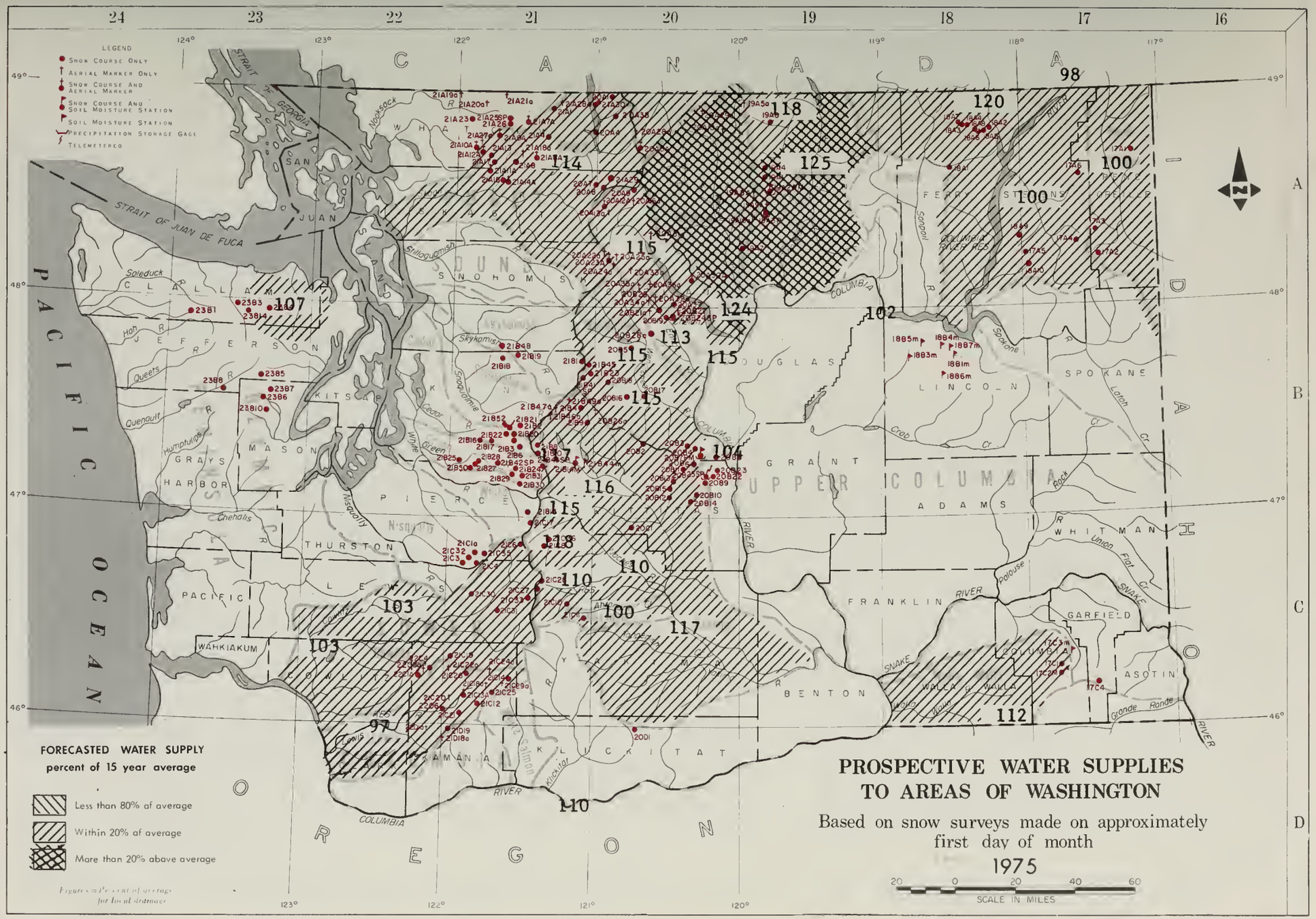
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1975
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
CLARK
SKAMANIA
KLICKITAT
YAKIMA
BENTON
FRANKLIN
WALLA WALLA
COLUMBIA
GARFIELD
ASOTIN
WHITMAN
ADAMS
LINCOLN
SPOKANE
GRANT
DOUGLAS
FERRY
STEVENS
UPPER COLUMBIA
COLUMBIA RIVER RES
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	1BA9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17AS	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	3BN	20E	6400
Oollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	2BN	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	2BN	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	2BN	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SF	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	293C
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3B75
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21BB	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C1Ba	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	1S	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
Green River					
Airstrip	21B24	1B	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	1B	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B4B	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Oevils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Oock Butte	21A11A	8	36N	BE	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	BE	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksock River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	BE	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

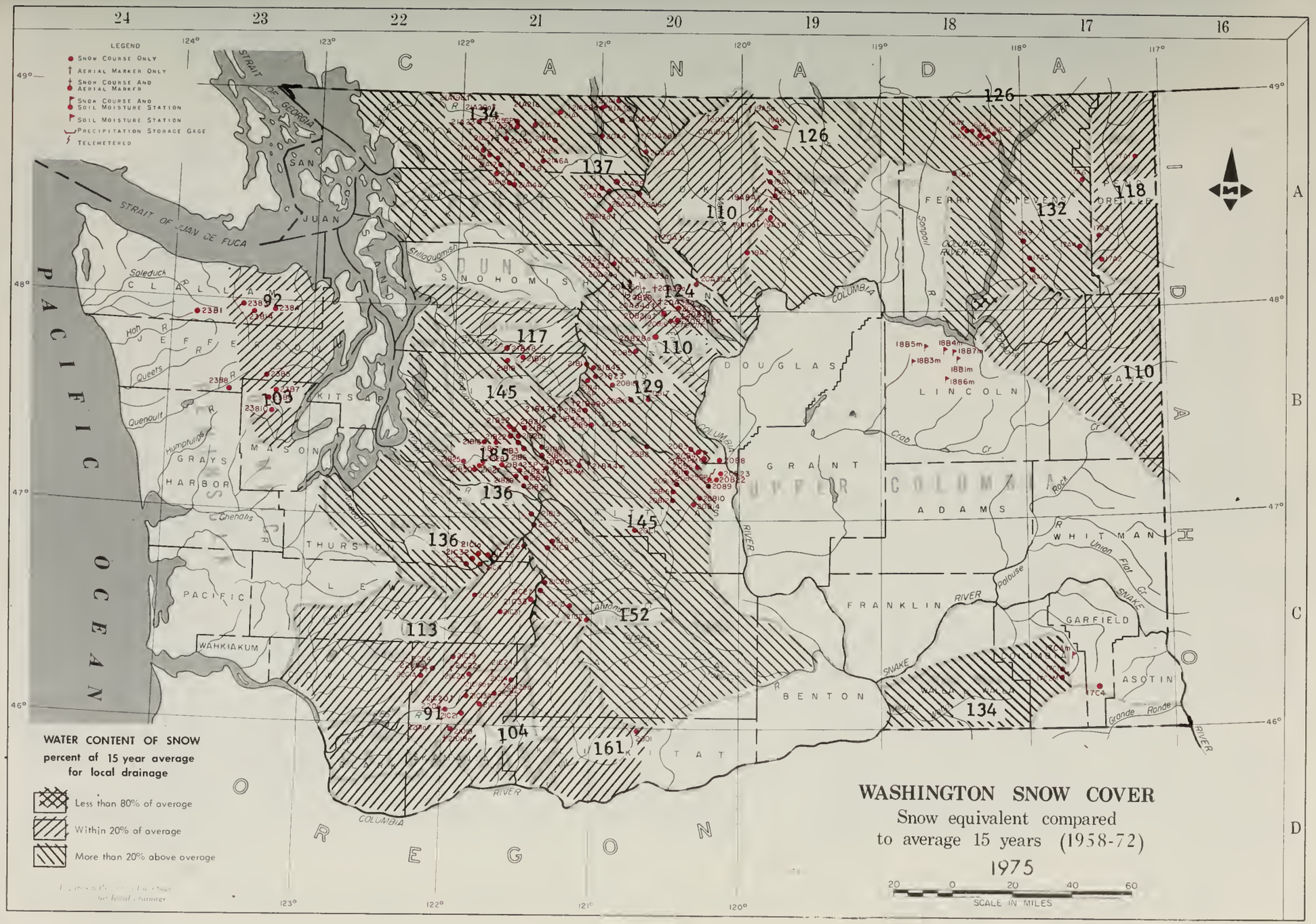
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Oeer Park	23B4	1	28N	SW	5200
Morse Creek					
Cox Valley	23B14	31	29N	6W	4500
Elwho River					
Hurricane	23B3	36	29N	7W	4S00
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1975
SCALE IN MILES
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
PACIFIC OCEAN
OREGON
IDAHO
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
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KITSAP
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GRAYS HARBOR
THURSTON
PACIFIC
WAHKIAKUM
SNOHOMISH
KING
PIERCE
LEWIS
SKAGIT
DOUGLAS
LINCOLN
GRANT
ADAMS
FRANKLIN
BENTON
WHITMAN
GARFIELD
ASOTIN
FERRY
STEVENS
SPOKANE
COLUMBIA
COLUMBIA RIVER
SNAKE RIVER
WALLA WALLA
Grande Ronde
Palouse
Union Flat Cr
Rock Cr
Crab Cr
Sanpoil R
Stillaguamish R
Skagit R
Nooksack R
Skykomish R
Snoqualmie R
Cowlitz R
Lewis R
Chehalis R
Humptulips R
Quinault R
Queets R
Hoh R
Soleduck
Nisqually R
Puyallay R
Green R
Duwamish R
Cedar R
Tolt R
Sauk R
Stillaguamish R
Nooksack R
Skagit R
Cascade Range
Olympic Mountains
Columbia River Res
Lake Roosevelt
Lake Chelan
Lake Wenatchee
Lake Cle Elum
Lake Kachess
Lake Keechelus
Lake Tapeto
Lake Tahoma
Lake Kapowsin
Lake Sammamish
Lake Washington
Lake Union
Lake Sawyer
Lake Tanwax
Lake Ozette
Lake Quinault
Lake Crescent
Lake Cushman
Lake Sylvia
Lake Aldwell
Lake Mills
Lake Easton
Lake Keechelus
Lake Kachess
Lake Cle Elum
Lake Wenatchee
Lake Chelan
Lake Roosevelt
Lake Tapeto
Lake Tahoma
Lake Kapowsin
Lake Sammamish
Lake Washington
Lake Union
Lake Sawyer
Lake Tanwax
Lake Ozette
Lake Quinault
Lake Crescent
Lake Cushman
Lake Sylvia
Lake Aldwell
Lake Mills
Lake Easton

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20821a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	2082	35	22N	17E	4270
Chiwaukum G. S.	20816	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21845	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SF	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20BB	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	1BB5m	17	27N	32E	2378
Sherman	1BB7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	5875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21018a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A3B	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	31	29N	6W	4500
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
March 1, 1975

* *
* There appears to have been a general improvement in the water supply fore- *
* casts for the State of Washington from that which was reported last month. *
* Most forecast points are now expected to flow about 5 percent greater than *
* that which was forecasted on February 1. As usual, there are some minor *
* exceptions, but these are on the smaller tributaries. All forecasts are for *
* normal or above water supplies during the up coming snow melt season. The *
* Columbia at Birchbank and the Lewis at Ariel are the only ones forecasted *
* less than normal and these are only 2 percent and 3 percent below, respec- *
* tively. The high flows are forecasted to occur from the Okanogan and Methow *
* River systems. The Okanogan at Tonasket is forecast to flow 25 percent *
* above normal and the Methow 24 percent above. The Water Resources Service *
* of British Columbia is forecasting the inflow to Okanogan Lake only *
* slightly below the near record high flows of last year. Since the Okanogan *
* above the Similkameen is only about 20 percent of the total flow of the *
* Okanogan at Tonasket, this well above normal inflow will be absorbed by the *
* lower flows expected from the Similkameen. During the month of February, *
* rainfall was all well above normal, resulting in an accumulation of precip- *
* itation for the winter months on the plus side. River flows during the past *
* month were generally below normal, the result of below normal temperatures *
* during February. Flows ranged from 60 percent below normal on the Spokane *
* River at Post Falls to a high of 5 percent above normal for the Klickitat *
* River as measured near Pitt. Reservoirs vary from above to below normal, *
* but this is a result of need for irrigation water and/or power supplies. *
* Adequate flows are expected to fill all reservoirs with the spring runoff *
* and several of the irrigation reservoirs are presently being lowered to *
* handle the above normal inflows expected. *
* *
* *

SNOW COVER

Snow surveys made near the first of March indicate the snow pack to range from a low of 9 percent below normal for the Lewis River Basin to a high of 85 percent above normal for the Green River Basin. This large range of snow cover, percentagewise, is the result of variable snow pack, elevationwise. In the Lewis River, some of the low elevation snow courses are reported to have well above normal snow packs. The higher elevation snow courses have lesser amounts but in this basin there are more high elevation snow courses than lower elevation snow courses. In the Green River Basin, it is just the opposite with the majority of snow courses at the lower elevations. In this case there is a greater influence in these figures by the lower elevation snow courses.

In the Upper Columbia Basin the snow cover, as compared to last year, ranges from 30 percent below normal to 28 percent above. Comparing this years snow cover to that which occurred in 1973 at this time, this range is from a low of 51 percent above to 184 percent above and when compared to normal, the range is from 10 percent above to 52 percent above. In the

Lower Columbia area, comparing the snow cover to last year, the range is from 37 percent below to 2 percent above and when comparing to 1973, the range is from 129 percent above to a high of 213 percent above. When comparing this area to normal the range is from the previously reported 9 percent below normal to the high of 61 percent above. The Puget Sound Drainage snow courses, when compared to last year, range from 36 percent below to 12 percent below. Comparing the same courses to 1973, the range is from 77 percent above to 222 percent above and comparing to normal, 17 percent above to the previously mentioned 85 percent above.

RESERVOIRS

The three major power reservoirs have water in storage that varies from 34 percent below normal for the Chelan Lake to 51 percent above for Lake Roosevelt. The irrigation reservoirs in the state have water in storage only 7 percent below normal and range from 73 percent below normal for Bumping Lake to 24 percent above for Salmon Lake near Okanogan. As previously reported, all reservoirs will fill with the spring runoff but uncontrolled spillage should be minimal through advanced management practices.

PRECIPITATION

During February, rainfall, as measured by the National Weather Service, at the lower valley stations was all well above normal. The wet spot was northeastern Washington, which had rainfall that was 144 percent greater than average. The southwestern slopes of the Cascades were reported to have only 7 percent above normal and the northwestern slopes, 9 percent. The Columbia River in Canada had precipitation 28 percent above normal and the head waters of the Pend Oreille and Spokane Rivers, 33 percent above. Central Washington was reported to have rainfall that was 26 percent above normal. This above normal precipitation should generally offset the well below normal precipitation that we had up through November of 1974.

SOIL MOISTURE

From the scattered reports of soil moisture at the higher elevations, the soils are still quite dry but with the above normal snow packs, this dryness will have little effect on the outcome of spring runoff.

STREAMFLOW

The cold weather of February generally kept all streams running well below normal. As reported before, the Spokane River inflow to Coeur d'Alene Lake was 60 percent below normal. The main stem of the Columbia River had a flow that ranged from 37 percent below normal at Grand Coulee to 16 percent below at Birchbank. The resultant of all streams is measured at The Dalles and flow there was 12 percent below normal. Forecasts of streamflow range from a high of 25 percent above normal to a low of 3 percent below so adequate flows can be expected during the forth coming runoff season. Numerical forecasts can be found following this narrative statement.

STREAMFLOW FORECASTS - MARCH 1975

following summarized runoff forecasts are based principally on mountain snow-er and on the assumption that precipitation and temperature will be near average m the present time to the end of the forecast period. Appreciable deviations m normal of temperature and/or precipitation will correspondingly modify these ecasts. Streamflow figures for 1974 are preliminary and subject to revision.

in, Stream and tation	Forecast Runoff 1975	Seasonal Streamflow in Thousands of Acre-Feet % 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr Average 58-72
		COLUMBIA BASIN					
umbia River System							
umbia River	45700	98	Apr-Sep	54227	34796	56680	46430
t Birchbank 1/	37100	99	Apr-Jul	44492	27876	46587	37548
	25900	94	Apr-Jun	31893	20203	34333	27549
umbia River	70500	102	Apr-Sep	85139	45849	85860	68868
t Grand Coulee 1/	60000	103	Apr-Jul	73671	38193	73431	58379
	46400	100	Apr-Jun	57033	29886	57727	46060
umbia River	78000	104	Apr-Sep	96939	49117	97430	75337
l Rock Island Dam 1/	65200	102	Apr-Jul	84480	41200	84085	64192
	51400	102	Apr-Jun	65246	32032	66051	50604
umbia River	110000	105	Apr-Sep	139724	65162	135452	104670
t The Dalles, Or 1/	94000	105	Apr-Jul	123569	54260	118552	89893
	76500	105	Apr-Jun	99282	43395	96933	73158
D OREILLE RIVER SYSTEM							
d Oreille River							
l. Box Canyon	16000	100	Apr-Sep		8311	20294	15953
	14600	99	Apr-Jul		7614	18724	14688
	12400	97	Apr-Jun		6756	16109	12777
TLE RIVER SYSTEM							
tle River	2250	120	Apr-Sep	2854	1121	2289	1873
r. Laurier	2150	120	Apr-Jul	2780	1093	2205	1793
	1975	120	Apr-Jun	2514	1020	1965	1640

Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Forecast period	1974	1973	1972	15-Yr Averag 58-72
	Seasonal Streamflow in Thousands of Acre-Feet						
Kettle River System (Cont.)							
Colville River	148	100	Apr-Sep		54	114	148
at Kettle Falls	137	100	Apr-Jul		50	103	137
	125	98	Apr-Jun		48	94	128
Spokane River System *							
Spokane River	3250	109	Apr-Sep		1140	4002	2983
at Post Falls, ID 2/	3150	109	Apr-Jul		1082	387	2899
	3010	109	Apr-Jun		1022	3644	2773
Okanogan River System							
Similkameen River	1790	118	Apr-Sep	2276	736	3259	1517
nr. Nighthawk	1670	117	Apr-Jul	2151	697	3090	1424
	1470	120	Apr-Jun	1729	621	2568	1222
Okanogan River	2150	125	Apr-Sep	2718	765	3852	1723
nr. Tonasket	1950	123	Apr-Jul	2491	707	3523	1582
	1670	124	Apr-Jun	1985	622	2895	1349
Methow River System							
Methow River	1280	124	Apr-Sep		512	1959	1031
nr. Pateros	1200	125	Apr-Jul		476	1819	963
	1030	124	Apr-Jun		417	1524	832
Chelan River System							
Chelan River	1440	115	Apr-Sep	1343	777	1866	1253
at Chelan 3/	1300	117	Apr-Jul	1054	680	1619	1112
	1040	118	Apr-Jun	658	544	1250	881
Stehekin River	1040	115	Apr-Sep		541	1235	904
at Stehekin	900	116	Apr-Jul		447	1044	776
	710	118	Apr-Jun		352	772	600
Entiat	270	113	Apr-Sep		145	398	239
nr. Ardenvoir	245	112	Apr-Jul		131	361	220
	204	113	Apr-Jun		113	283	180

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

sin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr. Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
natchee River System							
natchee River	1510	115	Apr-Sep		790	1926	1312
at Plain	1370	115	Apr-Jul		709	1686	1187
	1050	110	Apr-Jun		589	1272	956
natchee River	2060	115	Apr-Sep	2633	1033	2787	1786
at Peshastin	1880	116	Apr-Jul	2297	938	2464	1629
	1460	110	Apr-Jun	1670	786	1883	1324
emilt Basin	140	101	May-Sep			145*	138*
nr. Wenatchee							
kima River System							
kima River	165	117	Apr-Sep	241	83	220	142
nr. Martin 4/	150	115	Apr-Jul	223	76	198	131
	130	112	Apr-Jun	177	70	167	116
kima River	1120	116	Apr-Sep		555	1515	965
at Cle Elum 5/	1040	119	Apr-Jul		489	1374	877
	910	119	Apr-Jun		433	1156	764
kima River	2020	117	Apr-Sep		582	3231	1730
nr. Parker 6/	2000	118	Apr-Jul		590	3071	1701
	1850	117	Apr-Jun		598	2694	1580
chess River	150	120	Apr-Sep	200	66	195	125
nr. Easton 7/	140	119	Apr-Jul	188	63	182	118
	125	118	Apr-Jun	151	59	153	106
e Elum River	570	120	Apr-Sep	728	285	747	477
nr. Roslyn 8/	520	119	Apr-Jul	650	255	670	437
	430	116	Apr-Jun	493	220	537	372

Thousands of Miners' inches.
Observed flow corrected for storage in Lake Keechelus.
Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
Observed flow corrected for storage in Lake Kachess.
Observed flow corrected for storage in Lake Cle Elum.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Forecast period	1974	1973	1972	15-Yr Avera 58-7
			Seasonal Streamflow in Thousands of Acre-Feet				
Yakima River System (Cont.)							
Bumping River	173	118	Apr-Sep	227	74	228	146
nr. Nile 9/	158	118	Apr-Jul	207	68	203	134
	129	115	Apr-Jun	156	61	155	112
American River	147	115	Apr-Sep		70	186	128
nr. Nile	134	114	Apr-Jul		65	169	118
	110	110	Apr-Jun		58	137	100
Tieton River	270	110	Apr-Sep	405	160	407	247
at Tieton Dam 10/	228	108	Apr-Jul	337	124	342	211
	179	104	Apr-Jun	255	99	267	172
Naches River	980	110	Apr-Sep		442	1477	889
nr. Naches 11/	875	108	Apr-Jul		385	1339	810
	740	106	Apr-Jun		336	1106	698
Ahtanum Creek	48	100	Apr-Sep		21	75	48
nr. Tampico 12/	44	100	Apr-Jul		18	69	44
	40	103	Apr-Jun		16	59	39
Lower Columbia River System							
Mill Creek	30	112	Apr-Sep		17	34	27
nr. Walla Walla	26	108	Apr-Jul		13	29	24
	23	109	Apr-Jun		11	26	21
Lewis River	1300	97	Apr-Sep	1872	800	1597	1342
at Ariel 13/	1150	98	Apr-Jul	1684	666	1392	1174
	1010	96	Apr-Jun	1420	574	1236	1052
Cowlitz River	2170	103	Apr-Sep		1252	3048	2106
Blw. Mayfield Dam	1940	105	Apr-Jul		1068	2672	1846
	1670	106	Apr-Jun		904	2201	1578
Cowlitz River	2860	103	Apr-Sep	4296	1676	3819	2768
at Castle Rock 14/	2540	105	Apr-Jul	3850	1419	3331	2416
	2150	103	Apr-Jun	3158	1212	2782	2083

9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (Combined)
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

sin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr. Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
OLYMPIC PENINSULA							
ngeness River System							
ngeness River	176	107	Apr-Sep		120	207	165
nr. Sequim	150	109	Apr-Jul		98	171	137
	112	108	Apr-Jun		74	127	104
PUGET SOUND							
agit River System							
agit River at Newhalem 15/	2770	114	Mar-Aug	3150	1610	3800	2418

5/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

e following tabulation of Washington stream basins presents the water content of e snow about March 1, 1975 as percent of the samd date in 1974 and 1973 and erage of record

ibutary Basin	No. of Courses Average	1975 Snow Water Expressed as percent of 1974	1973	1958-72 Avg.
		UPPER COLUMBIA BASIN		
d Oreille	17	83	181	118
tle	15	94	179	126
ville	4	94	204	132
kane	11	77	203	110
nogan	43	86	181	126
how	10	70	151	110
lan	8	88	152	124
iat	10	92	168	110
atchee	9	81	245	129
ima	27	90	255	145
anum	2	128	284	152
		LOWER COLUMBIA		
l Creek	3	63	297	134
ckitat	1	102	-	161
te Salmon	2	74	229	104
is	18	69	234	91
litz	11	80	313	113
		PUGET SOUND		
squally	4	86	208	136
te	3	88	199	136
en	8	78	322	185
qualmie	3	64	302	145
komish	3	69	236	117
git	15	86	212	137
ksack	5	78	177	134
		OLYMPIC PENINSULA		
komish	4	64	164	103
ha	1	61	153	92
geness	1	64	156	-

RESERVOIR STORAGE - 1000 ACRE FEET

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (March) 1975	1974	1973	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	58.9	127.9	53.3	162.4
Columbia	Franklin D. Roosevelt Lake	5232.0	4304.9	-1175.4	3729.1	2843.8
Columbia	Banks Lake	761.8	706.9	720.3	613.3	588.3
Okanogan	Conconully Reservoir	13.0	11.2	6.4	11.6	11.6
Okanogan	Salmon Lake	10.5	9.2	7.3	9.5	7.4
Chelan	Lake Chelan	676.1	155.1	228.5	141.4	234.9
		YAKIMA				
Yakima	Keechelus Lake	157.8	95.4	99.4	102.0	105.5
Kaches	Kachess Lake	239.0	153.6	107.9	195.0	183.6
Cle Elum	Lake Cle Elum	436.9	267.4	195.7	319.1	264.5
Bumping	Bumping Lake	33.7	2.8	4.7	9.1	10.2
Tieton	Rimrock Lake	198.0	121.6	132.1	153.3	128.2
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	782.4	1030.4	870.3	873.9
Skagit	Diablo Reservoir	90.6	86.9	86.4	89.0	85.0
Skagit	Gorge Reservoir	9.8	8.8	8.2	8.1	-

1/ Based on Active Storage

* 15-year Average 1958-72

SOIL MOISTURE - MARCH

ainage Basin d ation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Mar. 1 1975	1974	1973
ANOGAN							
lmon Meadows	19A2M	4500	48	5.4	2.0	3.7	2.3
out Creek	3-M	3600	48	7.3	3.2	3.8	3.2
KIMA							
mery Flat	21B20m	2200	48	6.9	-	4.9	5.2
ke Cle Elum	21B14M	2200	48	12.8	-	9.3	9.2
LLA WALLA							
use	17C3m	3650	48	11.1	-	10.3	7.6
lmers	17C2M	4400	48	12.0	-	10.1	10.6
NATCHEE							
per Wheeler	20B7M	4400	48	12.7	8.6	11.1	8.9

FALL SOIL MOISTURE

ainage Basin d ation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1974	1973	1972
ANOGAN							
lmon Meadows	19A02M	4500	48	5.4	1.8	2.6	2.8
out Creek	3-M	3600	48	7.3	3.0	2.8	3.3
KIMA							
mery Flat	21B20m	2200	48	6.9	-	2.6	4.1
ke Cle Elum	21B14M	2200	48	12.8	-	6.1	8.7
LLA WALLA							
use	17C3m	3650	48	11.1	-	5.6	6.0
lmers	17C2M	4400	48	12.0	-	7.6	7.7
NATCHEE							
per Wheeler	20B7M	4400	48	12.7	5.4	6.0	5.7

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct Average	1974 2/ Departure	WINTER Nov. 1974 - Average	Feb. 1975 2/ Departure
Columbia in Canada	1.22	-3.25	12.30	+1.09
Pend Oreille - Spokane	0.71	-3.77	18.74	+2.73
Northeastern Washington	0.30	-2.48	13.50	+3.94
Southeastern Washington	0.31	-2.92	12.78	-1.56
Central Washington	1.21	-3.54	28.69	+4.49
North Central Washington	0.37	-1.25	7.17	+1.26
Northwest Slope Cascades	3.25	-9.44	52.57	+8.16

Northeastern Washington - Lower Spokane, Colville, Sanpoil and lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

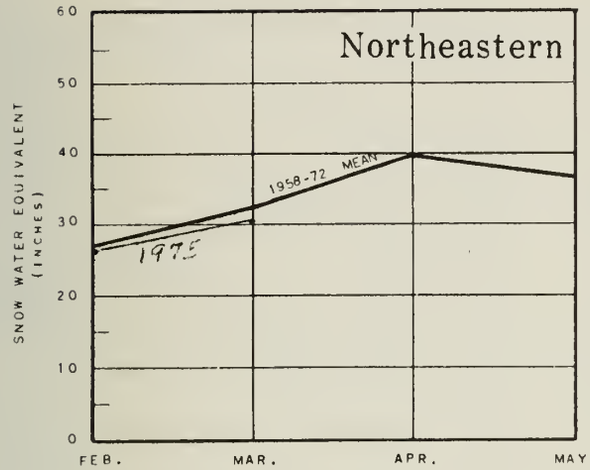
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

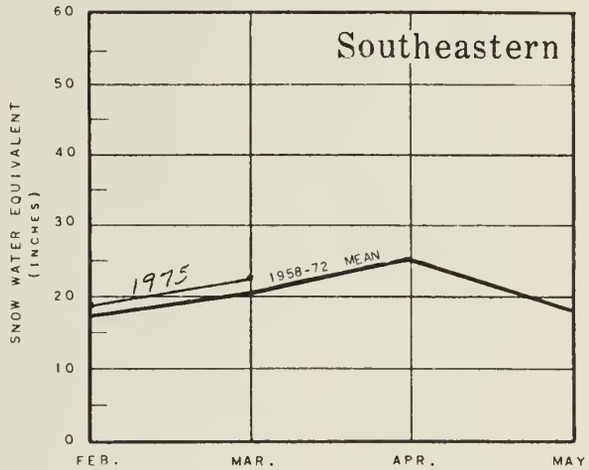
2/ - Departure from 15-year (1958-72) drainage division average.

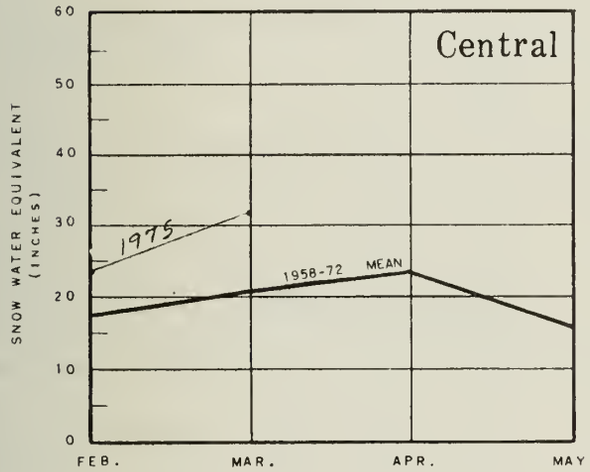
WASHINGTON SNOW COVER

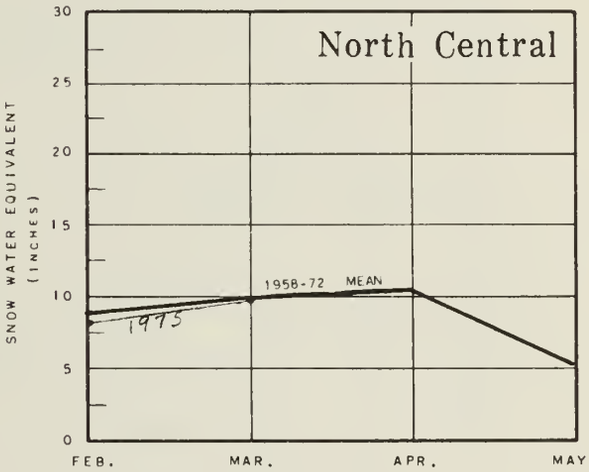
1975

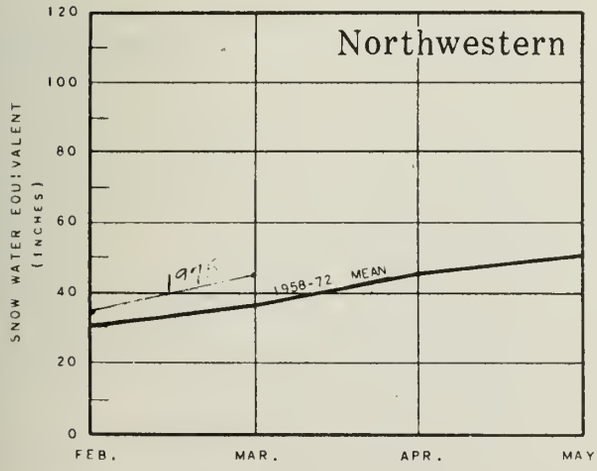
DRAINAGE AREAS

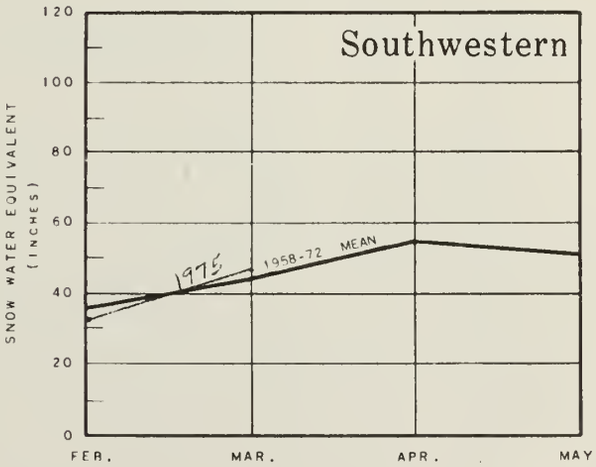










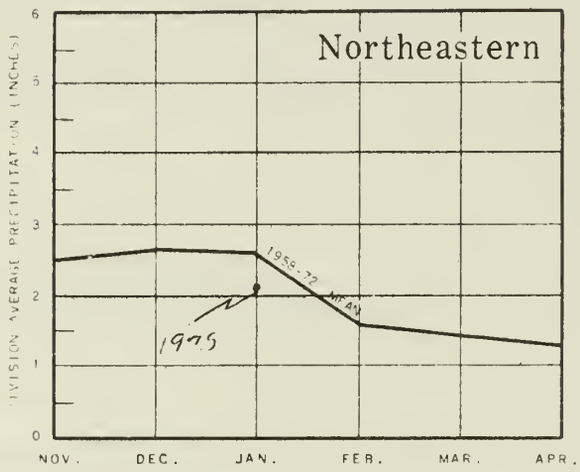


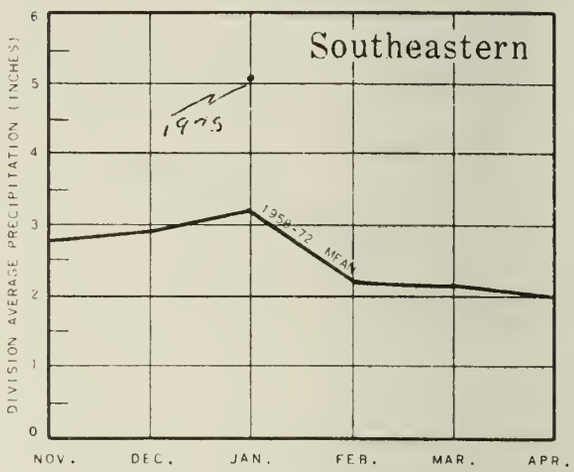
Selected Snow Survey Courses by Soil Conservation Service

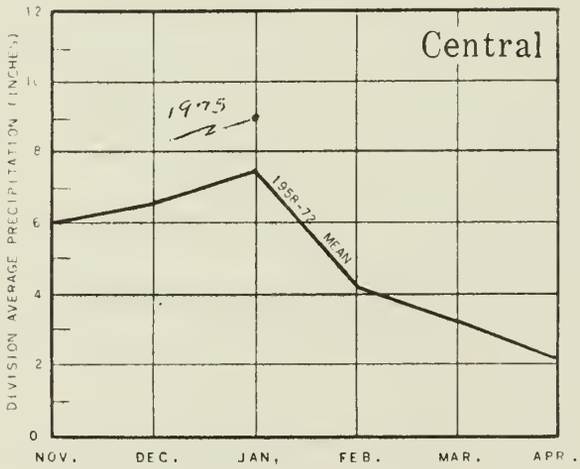
WASHINGTON VALLEY PRECIPITATION

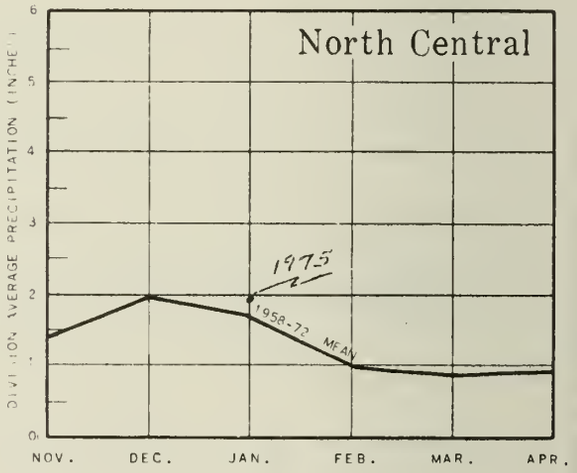
1975

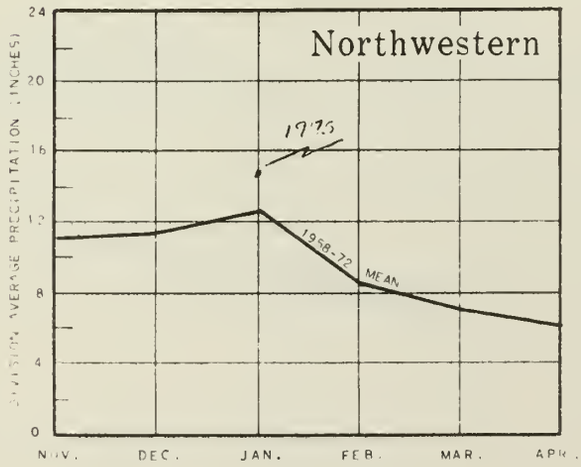
DRAINAGE AREAS

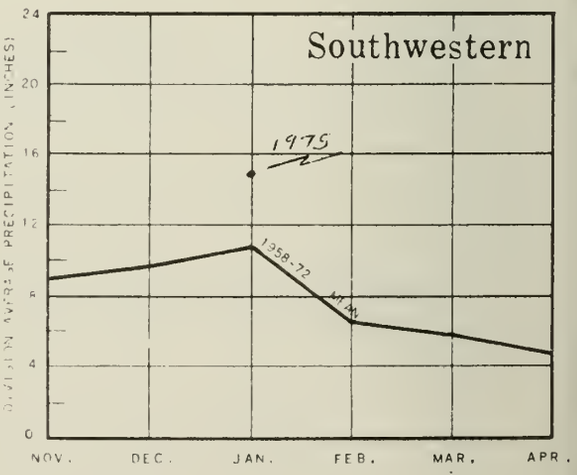






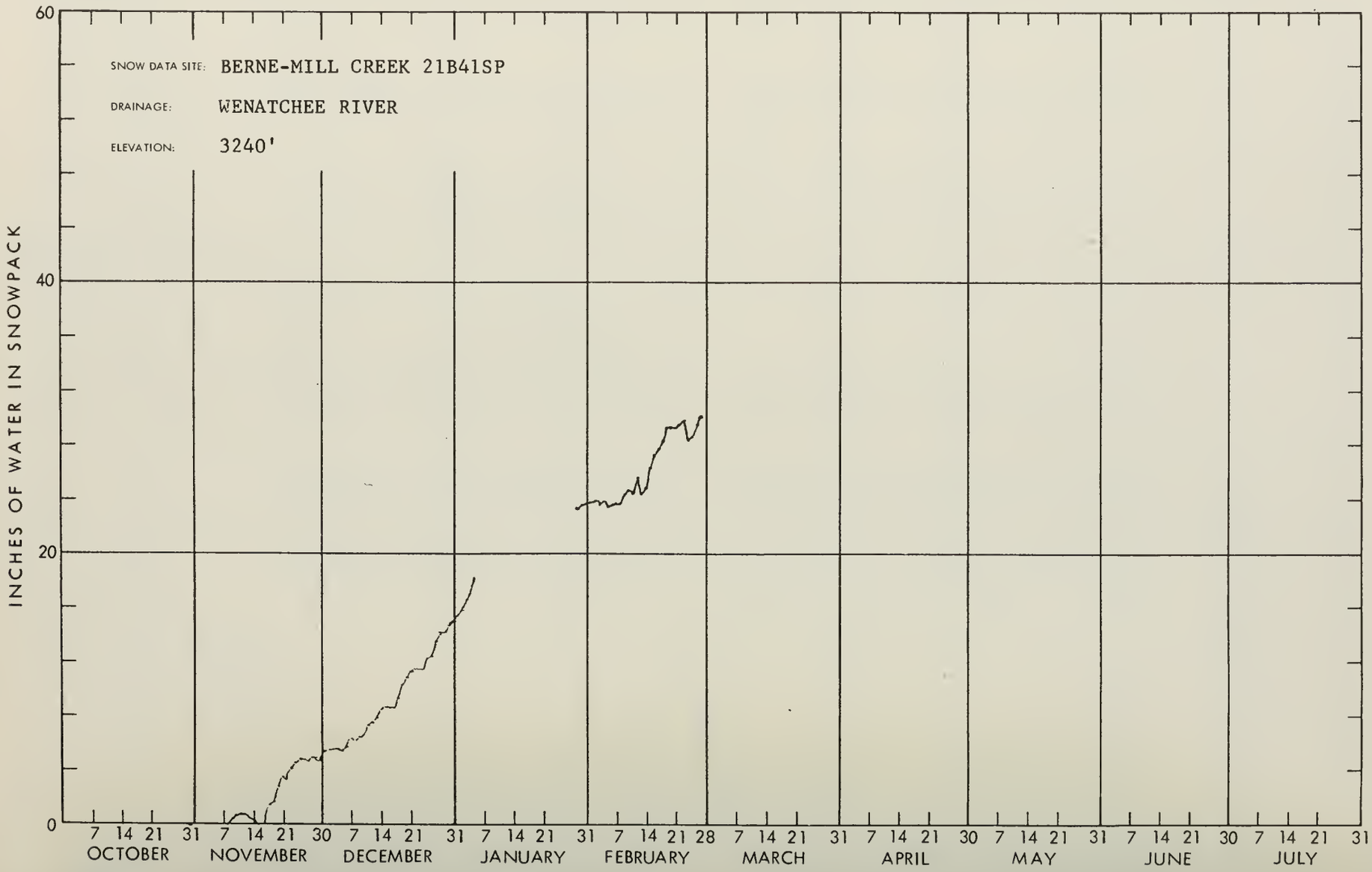






Preliminary Analysis by National Weather Service

WSFB-X13C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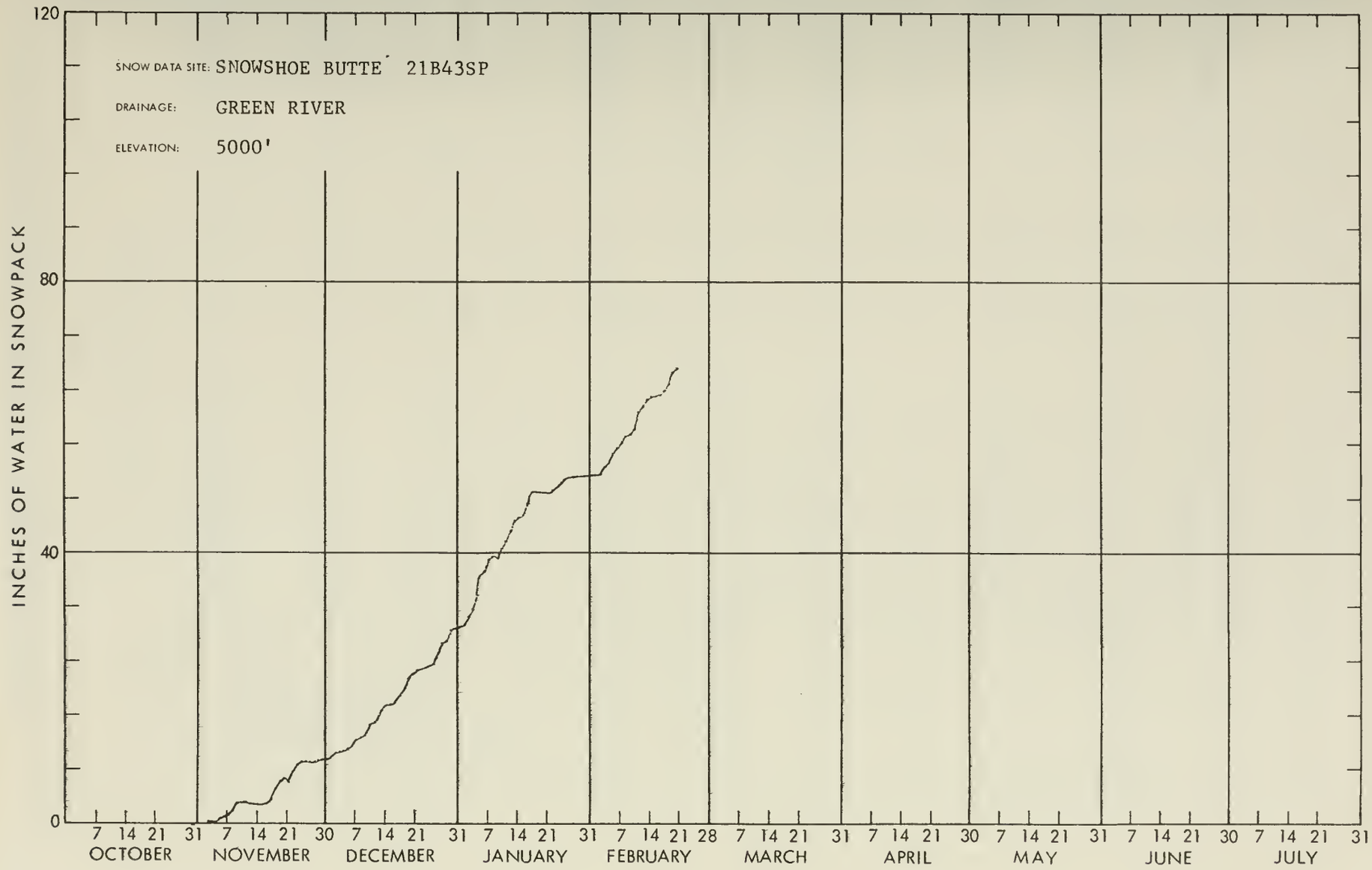
DRAINAGE: WENATCHEE RIVER
ELEVATION: 3240'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

WSFB-X13D


SNOW DATA SITE: SNOWSHOE BUTTE 21B43SP
DRAINAGE: GREEN RIVER
ELEVATION: 5000'
INCHES OF WATER IN SNOWPACK
120
80
40
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

SNOW DATA TO MARCH 1, 1975 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	2/27	125	50.3	65.6	43.6
Baree Midway	15B16	4600	2/27	105	38.5	47.5	34.6
Baree Trail	15B15	3800	2/27	39	13.3	13.1	10.5
Benton Meadow	16A02	2344	2/25	31	8.6	4.0	6.1
Benton Spring	16A03	4900	2/25	68	21.4	28.9	17.4
Boyer Mountain	17A02	5250	2/25	87	28.0	39.0	23.7
Brush Creek Timber	14A13	5000	2/26	38	10.8	11.0	10.2
Chewelah	17A04	4923	3/1	58	18.2	-	16.2
Heart Lake Trail	14C10	4800	2/27	74	24.9	28.6	21.2
Hoodoo Basin	15C10	6000	2/26	126	46.9	63.4	46.1
Hoodoo Creek	15C01	5900	2/26	122	43.5	58.6	43.2
Lookout	15B02	5250	2/28	111	30.4	43.7	32.7
Mosquito Ridge	16A04A	5100	2/25	108	36.0	54.4	34.7
Nelson	19-Can	3050	2/26	61	17.7	20.0	14.5*
Schweitzer Bowl	16A06	4500	2/28	106	45.6	49.5	27.8
Schweitzer Ridge	16A05	6100	2/28	154	60.2	61.5	39.9
Winchester Creek	17A03	2970	2/24	45	12.2	13.8	12.1
KETTLE RIVER							
Barnes Creek	90-Can	5300	2/27	62	20.0	22.0	18.0*
Big White Mtn.	154-Can	5500	2/25	69	20.1	26.6	16.9*
Boulder Road	18A02	1450	2/27	24	7.0	2.2	4.9
Butte Creek	18A03	4070	2/27	39	10.9	10.2	9.3
Cabin Creek	18A08	3170	2/27	34	5.2	9.8	8.2
Carmi	126-Can	4100	2/23	37	10.8	8.0	6.1*
Farron # 1	17-Can	4000	2/26	53	14.1	17.8	12.4*
Farron # 2	243-Can	4000	2/26	51	13.8	17.7	New
Goat Creek	18A04	3595	2/27	31	8.9	8.7	7.1
Graystoke Lake	5-Can	5950	2/27	55	17.2	23.8	18.7*
Monashee Pass	48A-Can	4500	2/27	49	14.6	14.2	12.7*
Old Glory Mtn.	42-Can	7000	3/1	92	37.4	38.0	24.6*
Snow Caps Creek	18A05	2150	2/27	23	6.0	6.1	5.1
Snow Caps Trail	18A06	2720	2/27	26	6.6	7.2	6.7
Summit G. S.	18A07	4600	2/27	35	9.6	10.1	7.4
Trapping Creek Lower	166-Can	3050	2/23	34	8.8	7.0	5.1*
Trapping Creek Upper	165-Can	4450	2/23	47	13.2	13.4	8.9*

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COLVILLE RIVER							
Baird	17A06	3215	2/26	39	10.2	9.5	7.1
Carlson	18A09	2885	3/1	29	9.6	2.4	4.6
Chewelah	17A04	4925	3/1	58	18.2	-	16.2
Stranger Mountain	17A05	4990	3/1	47	14.8	21.8	13.1
SPOKANE RIVER							
Above Burke	15B08	4100	2/28	83	25.9	27.0	-
Copper Ridge	16B02	4800	2/27	87	28.7	45.1	25.7
Forty-nine Meadows	15B03	5000	2/26	95	25.8	-	-
Fourth of July Summit	16B03	3100	2/28	45	14.4	13.5	7.3
Granite Peak	15B13A	6000	2/26	124	34.4	-	37.7
Kellogg Peak	16B05A	5560	2/25	87	29.8	41.4	-
Lookout	15B02	5250	2/28	111	30.4	43.7	32.7
Lost Lake	15B14A	6000	2/26	145	45.6	-	51.3
Lower Sands Creek	16B01	3400	2/27	61	18.5	26.8	17.5
Medicine Ridge	15B04A	6150	2/26	125	35.8	-	38.5
Mosquito Ridge	16A04A	5110	2/25	108	36.0	54.4	34.7
Roland Summit	15B05A	5200	2/25	92	31.0	54.1	31.3
Sherwin	16C01	3200	2/28	59	19.2	20.0	13.8
Sunset	15B09A	5600	2/25	118	30.7	-	33.7
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	3/2	35	9.1	7.3	5.9*
Blackwall Mountain	100-Can	6250	2/20	97	31.3	42.6	32.4*
Bouleau Creek	31-Can	5000	3/3	52	17.2	13.5	10.5*
Bouleau Lake	234-Can	4580	3/1	Not Measured		16.0	13.3*
Brenda Mine	193-Can	4800	2/26	54	17.7	15.6	12.8*
Brookmere	27-Can	3200	2/26	45	8.2	11.9	9.0*
Carrs Landing Upper	168-Can	3200	2/26	30	7.1	4.6	4.5*
Clark +	19A08a	7000	2/27	64	21.8	26.5	19.7
Enderby	130-Can	6250	2/26	105	27.8	42.7	32.4*
Esperon Creek Lower	164-Can	4400	2/23	54	15.9	15.0	10.9*
Esperon Creek Middle	163-Can	4700	2/23	60	18.7	20.2	13.5*
Esperon Creek Upper	162-Can	5400	2/23	71	22.8	25.0	16.5*
Freezeout Meadows New	20A38	5000	2/25	108	37.8	73.3	25.7
Graystoke Lake	5-Can	5950	2/27	55	17.2	23.8	18.7*
Hamilton Hill	107-Can	4900	2/27	59	17.6	19.2	14.2*
Harts Pass	20A05A	6500	2/24	130	46.1	64.4	38.8
Horseshoe Basin +	19A05a	7000	2/26	46	15.2	21.4	11.6
Isintok Lake	152-Can	5510	3/1	38	10.7	12.3	7.5*
Lost Horse Mountain	105-Can	6300	2/28	39	10.4	12.7	8.5*

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Loup Loup	19A07	4650	2/27	33	10.1	15.4	9.5
McCulloch	4-Can	4200	3/1	36	9.8	8.4	6.2*
Missezula Mountain	106-Can	5100	2/26	46	13.1	13.9	8.8*
Mission Creek	5A-Can	6000	2/27	66	21.7	25.6	17.3*
Monashee Pass	48A-Can	4500	2/27	49	14.6	13.2	12.7*
Mount Kobau	156-Can	5950	2/27	39	11.2	19.2	11.8*
Muckamuck +	19A09a	6390	2/26	46	15.6	24.8	15.1
Mutton Creek No. 1	19A01	5700	2/27	43	13.8	22.4	12.9
Mutton Creek No. 2	19A04	6000	2/27	37	12.7	21.4	13.3
Mutton Creek No. 2 SP	19A11SP	6000	2/27	-	9.5	17.4	New
New Copper Mountain	46A-Can	4300	2/25	29	6.5	8.4	5.8*
New Penticton Res. #2	183-Can	5225	2/28	40	12.9	10.9	7.6*
Nickel Plate Mtn.	47-Can	6200	2/27	36	9.1	12.0	7.1*
Oyama Lake	203-Can	4400	2/27	37	9.5	8.6	6.3*
Paysayten +	20A28a	4300	2/26	63	20.8	22.4	15.4*
Postill Lake	55-Can	4500	2/28	37	10.7	10.6	7.4*
Quartette Lake	34-Can	4000	2/25	41	10.1	15.9	-
Rusty Creek	19A03	4000	2/28	30	8.0	11.8	7.1
Salmon Meadows	19A02	4500	2/27	35	9.7	14.8	9.9
Silver Star Mountain	99-Can	6050	3/1	86	31.8	35.9	23.8*
Starvation Mtn. +	19A10a	6750	2/26	52	17.7	26.5	18.3
Summerland Reservoir	3A-Can	4200	3/2	46	14.5	12.2	8.7*
Touts Coulee	19A06	2845	2/26	17	3.0	5.7	4.0
Trout Creek	3-Can	4700	2/26	43	11.2	9.9	6.4*
Vaseux Creek	233-Can	4600	3/2	30	6.9	11.2	7.2*
White Rocks Mountain	70-Can	6000	2/27	80	31.0	30.9	18.9*
METHOW RIVER							
Billy Goat Pass +	20A10a	6409	2/26	90	29.7	36.7	25.8
Dollar Watch +	20A29a	7000	2/26	84	27.7	34.7	25.8
Harts Pass	20A05A	6500	2/24	130	46.1	64.4	38.8
Horseshoe Basin +	19A05a	7000	2/26	46	15.2	21.4	11.6
Loup Loup	19A07	4650	2/27	33	10.1	15.4	9.5
Mutton Creek No. 1	19A01	5700	2/27	43	13.8	22.4	12.9
Mutton Creek No. 2	19A04	6000	2/27	37	12.7	21.4	13.3
Mutton Creek No. 2 SP	19A11SP	6000	2/27	-	9.5	17.4	New
Rusty Creek	19A03	4000	2/28	30	8.0	11.8	7.1
Salmon Meadows	19A02	4500	2/27	35	9.7	14.8	9.9
War Creek Pass +	20A31a	6500	2/26	132	43.6	55.1	40.5

\# Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	2/26	128	44.8	-	37.4
Greenwood Flat +	20A25a	3540	2/26	81	28.4	36.0	22.9
Little Meadows +	20A24a	5275	2/26	127	44.4	56.2	39.9
Lyman Lake	20A23A	5900	3/1	Not Measured		-	52.5
Park Creek Flat +	20A13a	2220	3/1	Not Measured		43.6	31.4
Park Creek Ridge	20A12A	4600	2/26	160	56.0	65.5	41.9
Petersons +	20A16a	3730	2/26	138	48.3	40.3	32.9
Rainy Pass	20A09	4780	2/24	123	42.6	51.4	36.0
Safety Harbor	20A30A	6300	2/26	105	33.6	-	25.7
War Creek Pass +	20A31a	6500	2/26	132	43.6	55.1	40.5
ENTIAT RIVER							
Blue Creek G. S. +	20B28a	5425	3/3	120	44.4	44.7	New
Brief	20B19	1600	2/23	32	8.4	6.6	7.5
Entiat Meadows +	20A33a	4800	3/3	138	51.1	56.4	45.7
Entiat River Trail +	20A34a	3150	3/3	82	27.1	28.5	21.8
Four Mile Ridge +	20B27a	7000	3/3	92	34.0	40.2	-
Fox Camp +	20A36a	6510	3/3	146	54.0	59.0	54.6
Pope Ridge	20B20	4300	2/24	71	23.0	25.9	16.5
Pugh Ridge +	20A32a	6400	3/3	97	35.9	40.5	34.5
Shady Pass	20A37	6200	2/26	88	33.0	-	-
Snow Brushy +	20A35a	3850	3/3	105	34.7	45.7	37.7
Tommy Creek +	20B21a	5300	3/3	76	28.1	35.0	28.3
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	2/14	94	33.2	36.3	23.9
			2/27	94	35.5	43.0	24.7
Berne-Mill Creek New SP	21B41SP	3240	2/27	79	30.4	38.0	21.0
Blewett Pass No. 2	20B02	4270	2/26	53	19.3	22.5	14.9
Chiwaukum G. S.	20B16	1810	2/14	42	11.6	15.2	11.2
			2/27	41	11.0	17.0	11.6
Fish Lake	21B04	3371	2/26	108	38.4	45.2	31.3
Lake Wenatchee	20B05	1970	2/14	55	15.9	17.6	13.6
			2/27	53	17.1	19.7	13.9
Leavenworth R. S.	20B17	1127	2/14	21	7.0	2.3	5.7
			2/26	21	7.1	2.5	4.2
Lyman Lake	20A23A	5900	3/1	Not Measured		-	52.5
Merritt	20B18	2140	2/14	67	20.8	21.6	15.5
			2/27	65	21.3	22.9	15.2
Stevens Pass	21B01	4070	2/14	149	54.6	63.7	42.5
			2/27	147	60.4	73.5	45.7
Stevens Pass Sand Shed	21B45	3700	2/14	111	37.5	52.3	-
			2/27	104	39.8	57.0	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	2/27	28	11.6	14.5	7.9
Scout-A-Vista	20B04	3400	2/27	35	11.7	13.3	8.1
STEMILT CREEK							
Jump-Off	20B08	4450	2/27	33	11.2	13.6	8.3
Stemilt Slide	20B06	5000	2/27	47	16.4	21.9	15.1
Upper Wheeler	20B07	4400	2/27	37	13.9	13.0	10.1
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	2/28	42	15.8	21.3	-
Colockum Creek Lower	20B23	4300	2/28	34	12.5	11.5	-
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	2/25	36	12.8	7.6	6.7
Big Boulder Creek	21B09	3200	2/26	75	25.3	31.6	18.5
Blewett Pass No. 2	20B02	4270	2/26	53	19.3	22.5	14.9
Bumping Lake	21C08	3450	2/13	59	18.0	21.1	15.2
			2/28	57	17.9	26.0	15.3
Bumping Lake New	21C36	3400	2/13	74	22.1	26.4	19.6
			2/28	73	25.1	31.9	20.0
Cayuse Pass	21C06	5300	2/24	212	83.1	99.5	70.4
Colockum Pass	20B09	5370	2/24	54	17.1	21.6	14.5
Cooke Creek	20B10	4123	2/24	34	10.3	11.0	6.1
Corral Pass	21B13	6000	2/21	163	48.0	52.0	34.3
Fish Lake	21B04	3371	2/26	108	38.4	45.2	31.3
Green Lake	21C10	6000	2/25	108	33.0	37.3	29.1
Grouse Camp	20B11	5385	2/27	52	17.6	24.3	15.3
High Creek	20B12	2930	2/28	27	7.4	9.1	5.2
Joe Lake	21B46a	4624	2/24	189	58.6	81.0	-
Lake Cle Elum	21B14M	2200	2/13	38	13.1	9.8	8.2
			2/27	40	13.2	11.9	8.1
Lemah Creek +	21B47a	3327	2/24	129	42.6	55.1	-
Manashtash	20C01	3935	2/28	28	8.0	6.6	4.3
Morse Lake	21C17	5400	2/27	157	71.0	-	47.7
Nanum	20B13	2340	2/27	38	11.5	14.4	9.6
Olallie Meadows	21B02	3625	2/21	196	52.6	81.8	40.6
Satus Pass	20D01	4030	2/28	39	14.0	13.7	8.7
Stampede Pass SP	21B10	3860	2/14	-	55.4	60.0	34.2
			3/1	-	61.2	-	36.2

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
YAKIMA RIVER (Cont.)							
Trail Creek	20B14	3360	2/24	18	5.8	5.0	2.2
Tunnel Avenue	21B08	2450	2/14	86	28.8	28.8	20.1
			2/28	89	32.2	32.6	21.2
Van Epps Pass +	20B26a	5925	2/24	137	48.0	62.3	-
Walters Flat	20B15	3360	2/27	32	9.9	11.0	6.9
Waptus Lake +	21B49a	3024	2/24	132	43.6	51.8	-
White Pass (E. Side)	21C28	4500	2/14	78	24.9	27.7	20.8
			2/27	77	27.3	35.9	22.0
White Pass (L. Lake)	21C27	4500	2/25	85	32.9	35.9	26.1
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	2/25	36	12.8	7.6	6.7
Green Lake	21C10	6000	2/25	108	33.0	37.3	29.1
LOWER COLUMBIA DRAINAGE							
ASOTIN CREEK							
Spruce Springs	17C04	5700	2/24	79	26.6	34.6	23.6
MILL CREEK							
Homestead	17C01	4030	2/26	30	11.6	17.2	7.4
Martin Springs	17C02	4400	2/26	48	16.2	23.5	11.9
Tollgate	18D3M	5070	2/25	74	22.9	42.4	21.1
KLICKITAT RIVER							
Satus Pass	20D01	4030	2/28	39	14.0	13.7	8.7
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	2/24	108	41.1	57.4	40.5
Surprise Lakes	21C13A	4250	2/24	119	47.8	64.0	44.2
WIND RIVER							
Old Man Pass	21D19	3100	2/24	39	13.9	23.4	17.2

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 7

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
LEWIS RIVER							
Blue Lake +	21C22a	4800	2/24	194	75.7	96.5	69.7
Bob's Trail	21C21	2200	2/24	34	11.8	20.3	14.2
Calamity Ridge +	22D01a	2500	2/24	8	3.2	4.2	6.7
Council Pass +	21C18a	4200	2/24	108	42.1	56.6	37.1
Cultus Creek	21C12	4000	2/24	108	41.1	57.4	40.5
Divide Meadow +	21C29a	5600	2/24	144	54.7	63.8	50.9
Grand Meadow	21C25	3500	2/24	71	26.8	35.2	23.8
Lone Pine Shelter	21C26	3800	2/25	91	34.6	59.6	35.0
Marble Mountain +	22C05a	3200	2/24	48	21.1	54.2	31.4
Mosquito Meadows	21C19	4100	2/25	95	36.0	52.8	36.6
New Muddy River	22C06	2000	2/24	17	7.1	5.9	10.6
Old Man Pass	21D19	3100	2/24	39	13.9	23.4	17.2
Plains of Abraham +	22C01a	4400	2/24	132	52.8	80.7	58.5
Smith Creek Road	22C04	2100	2/24	40	14.3	19.8	17.2
Spencer Meadow +	21C20a	3400	2/24	48	17.8	37.4	21.5
Surprise Lakes	21C13A	4250	2/24	119	47.8	64.0	44.2
Table Mountain +	21C24a	4200	2/24	130	50.7	63.8	41.7
Timbered Peak +	21D18a	3000	2/24	28	10.6	25.9	16.0
COWLITZ RIVER							
Cayuse Pass	21C06	5300	2/24	212	83.1	99.5	70.4
Mosquito Meadows	21C19	4100	2/25	95	36.0	52.8	36.6
Ohanapecosh	21C32	2200	2/24	50	18.8	18.9	15.8
Packwood Lake	21C31	2870	2/24	39	14.9	19.2	12.7
Pigtail Peak	21C33	5900	2/25	157	60.7	69.8	57.2
Plains of Abraham +	22C01a	4400	2/24	132	52.8	80.7	58.5
Potato Hill	21C14	4500	2/25	85	32.4	43.1	28.8
White Pass (E. Side)	21C28	4500	2/14	78	24.9	27.7	20.8
			2/27	77	27.3	35.9	22.0
White Pass (L. Lake)	21C27	4500	2/25	85	32.9	35.9	26.1
Willame Creek	21C30	3250	2/24	79	28.7	43.6	26.9
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	2/24	121	49.8	58.5	39.0
Longmire	21C03	2760	2/24	38	15.5	19.7	9.0
New Paradise Park	21C35	5500	2/24	187	80.0	87.2	61.8
Stem Glade	21C01	5050	2/24	182	72.0	80.7	60.5

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average #
WHITE RIVER							
Cayuse Pass	21C06	5300	2/24	212	83.1	99.5	70.4
Corral Pass	21B13	6000	2/21	145	48.5	52.0	34.3
Morse Lake	21C17	5400	2/27	157	71.0	-	47.7
GREEN RIVER							
Airstrip	21B24	1800	2/25	34	14.0	2.0	4.4
Charley Creek	21B25	1200	2/25	10	3.2	0.0	1.2
Cougar Mountain SP	21B42SP	3200	2/24	67	28.2	31.0	-
Grass Mtn. No. 2	21B27	2900	2/25	52	20.2	34.7	19.4
Grass Mtn. No. 3	21B28	2100	2/25	33	12.3	5.8	5.7
Lester Creek	21B29	3100	2/25	85	30.2	35.8	21.3
Lynn Lake	21B50	4000	2/25	63	26.7	-	-
Sawmill Ridge	21B31	4700	2/26	111	41.8	52.4	34.1
Snowshoe Butte SP	21B43SP	5000	2/21	177	67.8	88.8	-
Stampede Pass SP	21B10	3860	2/14	-	55.4	60.0	34.2
			3/1	-	61.2	-	36.2
Twin Camp	21B30	4100	2/25	88	30.8	38.0	21.6
CEDAR RIVER							
City Cabin	21B03	2390	2/25	62	24.1	29.0	13.5
Mt. Gardner	21B21	3300	2/25	57	23.1	31.8	15.6
Mt. Lindsay	21B16	2500	2/28	46	17.7	22.6	12.8
Mt. Washington New	21B52	3000	2/28	32	14.9	16.4	-
Rex River	21B17	2400	2/28	56	22.8	28.6	8.9
S. F. Cedar	21B06	3000	2/25	78	32.6	32.6	17.3
Tinkham Creek	21B20	3400	2/25	83	34.3	41.8	20.0
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	2/27	101	42.9	60.5	-
Lake Elizabeth	21B19	2900	2/26	95	36.6	65.7	36.4
Olallie Meadows	21B02	3625	2/21	142	52.6	81.8	40.6
S. F. Tolt	21B18	1900	2/27	14	5.5	2.4	2.7
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	2/26	95	36.6	65.7	36.4
Stevens Pass	21B01	4070	2/14	149	54.6	63.7	42.5
			2/27	147	60.4	73.5	45.7
Stevens Pass Sand Shed	21B45	3700	2/14	111	37.5	52.3	-
			2/27	104	39.8	57.0	-

Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	2/25	57	20.4	22.0	13.0
Beaver Pass	21A01	3680	2/25	87	30.2	45.5	28.3
Brown Top	21A28a	6000	2/25	162	59.0	90.6	-
Cloudy Pass	20A22a	6500	2/26	128	44.8	-	37.4
Devils Park	20A04	5900	2/24	129	47.9	61.5	39.4
Freezeout Cr. Trail	20A01	3500	2/25	49	13.7	21.7	11.8
Freezeout Meadows New	20A38	5000	2/25	108	37.8	73.3	25.7
Granite Creek	21A29	3500	2/24	67	21.0	24.8	-
Harts Pass	20A05A	6500	2/24	130	46.1	64.4	38.8
Klesilkwa	35B-Can	3700	3/1	Not Measured		20.7	13.0*
Lyman Lake +	20A23A	5900	3/1	Not Measured		-	52.5
Meadow Cabins	20A08	1900	2/24	33	10.6	6.0	6.8
New Hozomeen Lake	21A30	2800	2/25	50	15.7	20.2	-
New Tashme	26A-Can	2500	3/1	46	17.8	15.8	11.2*
Quartette Lake	34-Can	4000	2/25	41	10.1	17.3	-
Rainy Pass	20A09	4780	2/24	123	42.6	51.4	36.0
Thunder Basin	20A07	4200	2/24	102	36.2	30.7	19.8
BAKER RIVER							
Baker Pass +	21A27a	4900	2/27	190	76.0	109.0	-
Dock Butte +	21A11A	3800	2/24	169	68.0	94.0	61.3
Easy Pass +	21A07A	5200	2/24	170	68.0	100.0	72.0
Jasper Pass +	21A06A	5400	2/24	216	86.0	111.0	82.8
Marten Lake +	21A09A	3600	2/24	193	77.0	100.0	67.6
Mount Blum +	21A18a	5800	2/27	156	62.0	75.0	58.2
Panorama New	21A26	4300	2/13	166	61.0	101.3	-
			2/27	157	68.5	109.9	-
Rocky Creek +	21A12A	2100	2/24	80	32.0	49.0	25.4
Schreibers Meadow +	21A10A	3400	2/24	130	52.0	82.0	53.8
S. F. Thunder Creek +	21A14A	2200	2/24	36	14.0	18.0	8.1
Watson Lakes +	21A08A	4500	2/24	160	64.0	98.0	57.6
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	2/25	153	61.2	69.5	42.9
Canyon +	21A20a	5100	2/25	167	66.8	84.0	48.3
Glacier Creek	21A23	3700	2/25	67	25.5	36.8	21.6
Panorama New	21A26	4300	2/13	166	61.0	101.3	-
			2/27	157	68.5	109.9	-
Twin Lakes +	21A21a	5200	2/25	212	84.8	92.3	62.3

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MARCH 1, 1975 - APPENDIX 10

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	2/24	99	35.0	54.4	-
ELWHA RIVER							
Hurricane	23B03	4500	2/24	65	18.5	30.2	20.0
SKOKOMISH RIVER							
Black & White	23B07	4200	2/25	100	35.5	55.2	33.5
Black & White Lakes	23B06	4700	2/25	125	54.0	78.0	51.2
Four Streams	23B10	3000	2/25	73	27.8	53.4	27.0
Home Sweet Home	23B05	5200	2/25	160	63.7	88.0	64.5

Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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"The Conservation of Water begins with the Snow Survey"

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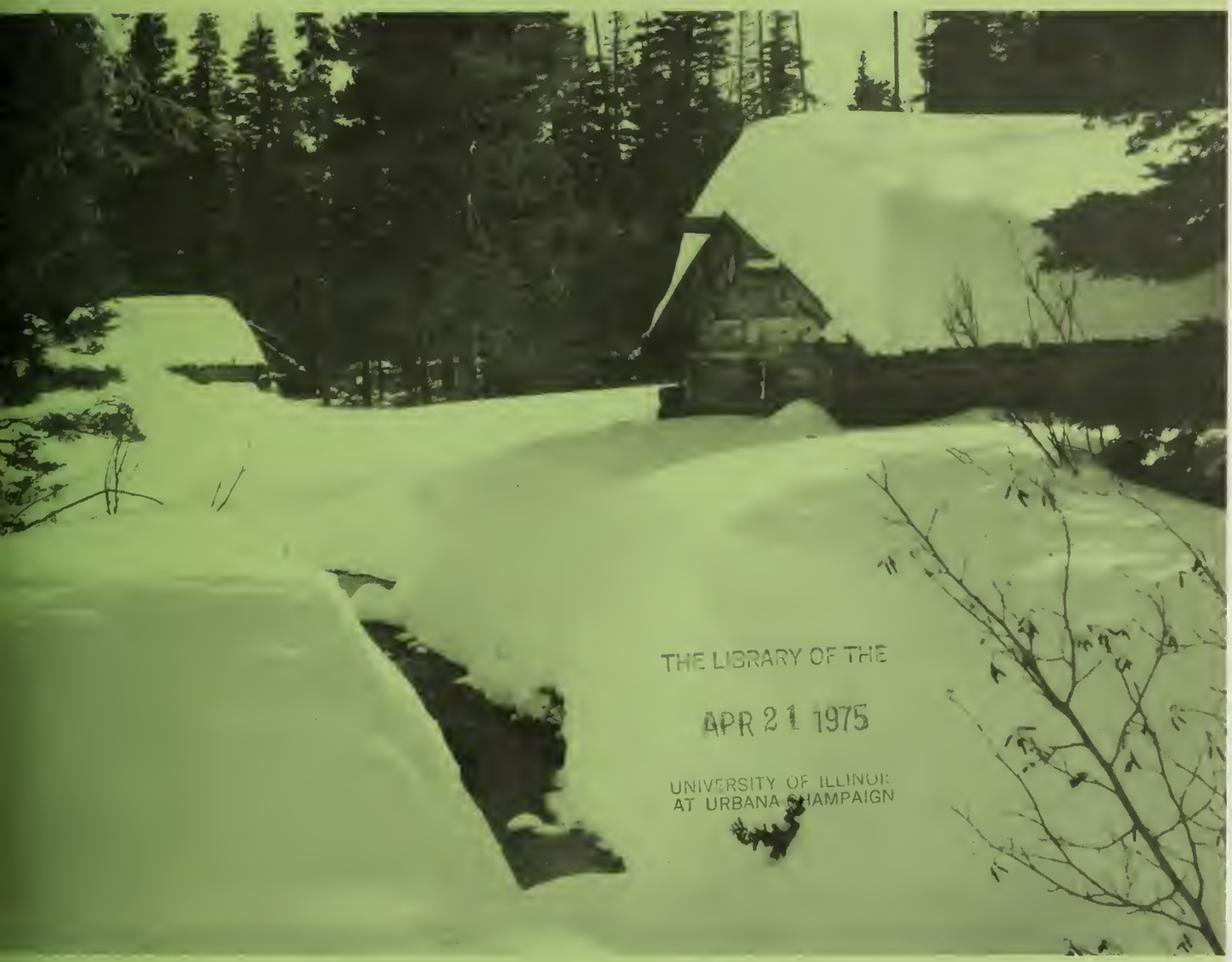
WATER SUPPLY OUTLOOK FOR WASHINGTON



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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
APR. 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO [illegible]-P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS-PORTLAND OREG 1974

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201

WATER SUPPLY OUTLOOK

State of Washington
April 1, 1975

** **
** The water supply outlook for the state of Washington and tributary **
** basins continues to be good, with a slight improvement over that **
** which was reported last month. Valley precipitation was generally **
** below normal, but mountain snow courses had a slightly greater **
** than average pick up during the month. The result of these **
** offsetting factors is a slight increase of most of the streamflow **
** forecasts as of April 1. Last month there was a 75 percent possi- **
** bility that the Okanogan River at Tonasket would exceed flood **
** stage. With the increased volumetric forecast, there is now a **
** higher probability that the river will go over flood stage. The **
** National Weather Service forecast of flood stage is not available **
** at this time. Power companies and irrigation districts, as well as **
** the Bureau of Reclamation, have been releasing water from storage **
** for the past couple of months. This has been done for two reasons. **
** Adequate water is expected, with the spring runoff, to fill these **
** reservoirs and on some streams, the dumping was done to prevent **
** uncontrolled spills later in the season, thus reducing downstream **
** damages. River flows were generally below normal, except from low **
** elevation watersheds. Streamflow forecasts now range from a low **
** of 2 percent below normal to a high of 30 percent above. **
** **
* *

SNOW COVER

Last years very excellent snow pack has generally not been exceeded during this 1974-75 snow build up season. A few drainages that were exceptions to the rule last year, again are exceptions this year. Six watersheds are now reported to have the same or a greater amount of water equivalent on the watershed than was reported last year; the rest, all less, ranging down to 35 percent less. When comparing this years snow pack to that which occurred in the very dry year of 1973, we have considerably more snow in all watersheds and on one, the Cedar River, the snow pack is 522 percent greater than was measured during that year. This number explains, in part, the elevation differences that we are experiencing this year. The lower elevation snow courses have more snow, percentagewise, than those at the upper elevations. This, in turn, will mean earlier runoff with some flashy peaks.

RESERVOIRS

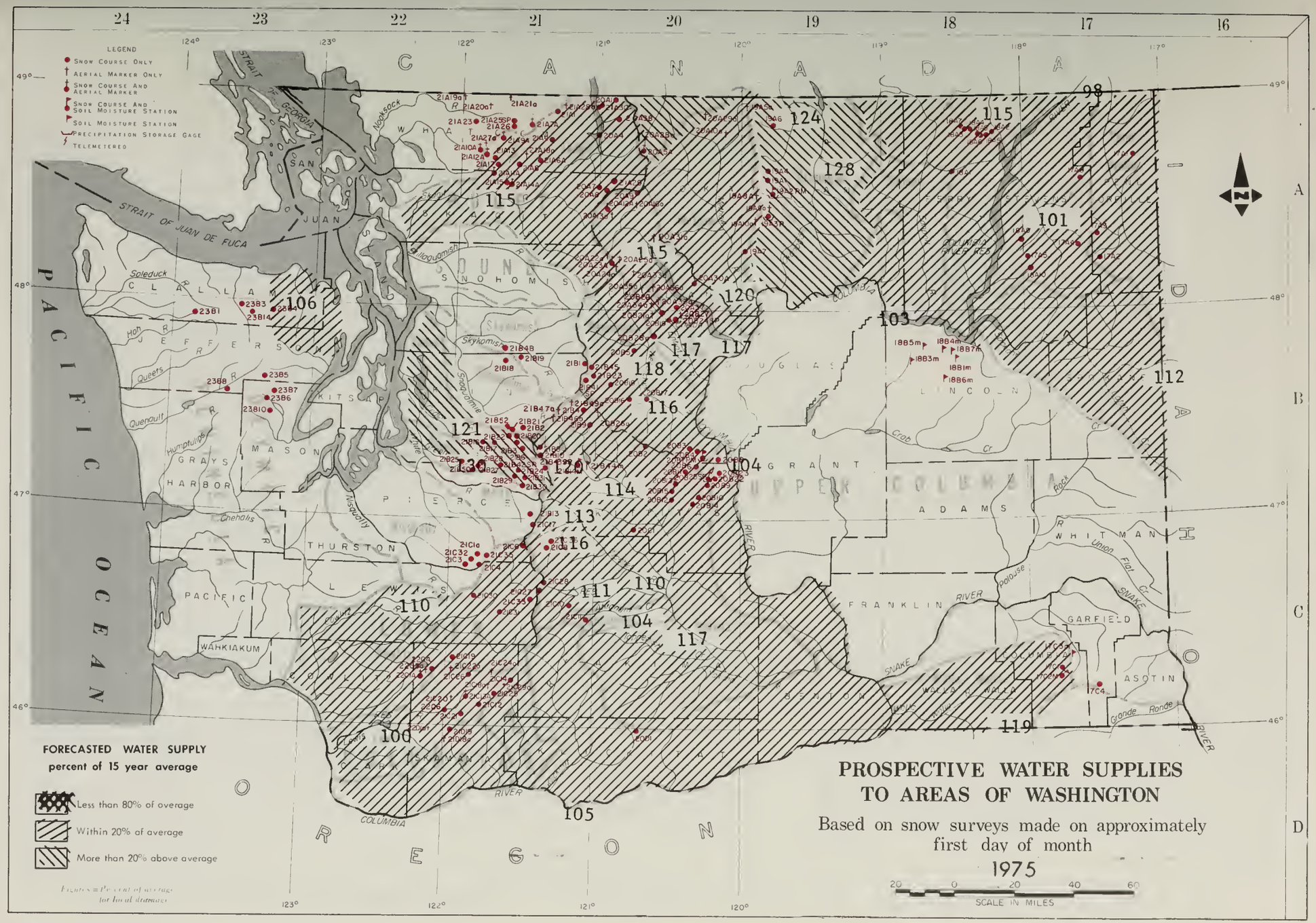
With minor exceptions, all reservoirs have well above normal amounts of water in storage at this time. The major irrigation reservoirs have water in storage only 62 percent of capacity and 90 percent of average. Power reservoirs have been reduced even further to take advantage of the power generation needs this winter and the abundance of snow behind the reservoirs.

PRECIPITATION

The National Weather Service reported rainfall at the valley stations to be above normal only in the northeastern and north-central portions of the state during the month of March. Winter precipitation, from November through March, still is well above average, while the fall rainfall amount, as previously reported, was negligible, ranging from 70 percent to 90 percent below normal. Soils beneath the snow pack are fairly dry and so some of this current snow pack will be required to bring these soil mantles to field capacity before runoff can take place.

STREAMFLOW

During the month of March, river runoff was generally below normal except from certain low elevation streams or where there was excessive evacuation of reservoirs, in anticipation of above normal inflows. The Palouse River, as measured at Hooper, had a flow 101 percent greater than average and the Okanogan at Tonasket had a flow 51 percent above normal. These are examples of the two conditions just mentioned. Forecasts of streamflow are expected to be near normal along the main stem of the Columbia and on the tributary basins from Montana. The Okanogan River system is expected to flow 24 percent and 28 percent above normal with the Methow expecting a 20 percent above normal flow. The Yakima, Wenatchee and Chelan River systems are expected to have an outflow between 10 percent and 20 percent above normal. On the Lower Columbia River system, the Lewis River is expected to have a normal outflow while the Cowlitz and Walla Walla Rivers are expected to be 10 percent and 20 percent above. On the west side, the rivers on the Olympic Peninsula are expected to flow less than 10 percent above normal while the Skagit, Cedar and Green River systems should have an outflow from 15 percent to 30 percent greater than average. Numerical forecasts can be found immediately following this narrative statement.


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1975
SCALE IN MILES
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
SKAMANIA
KLICKITAT
YAKIMA
BENTON
FRANKLIN
WALLA WALLA
COLUMBIA
GARFIELD
ASOTIN
WHITMAN
ADAMS
GRANT
DOUGLAS
LINCOLN
FERRY
STEVENS
PEND OREILLE
OKANOGAN
CHELAN
KITTITAS
UPPER COLUMBIA
COLUMBIA RIVER
SNAKE RIVER
Grande Ronde RIVER
Nooksack
Skagit
Stillaguamish
Snohomish
Skykomish
Snoqualmie
Nisqually
Chehalis
Hoh
Queets
Quinault
Humptulips
Soleduck
Palouse
Union Flat Cr
Rock
Crab Cr
Okanogan
Methow
Wenatchee
Entiat
Chelan
Similkameen
Kettle
Colville
Pend Oreille
Spokane
Lewis
Cowlitz
Klickitat
Yakima
Naches
Tieton
Cle Elum
Teanaway
Wenatchee
Methow
Okanog

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21BB	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	2101Ba	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B4B	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

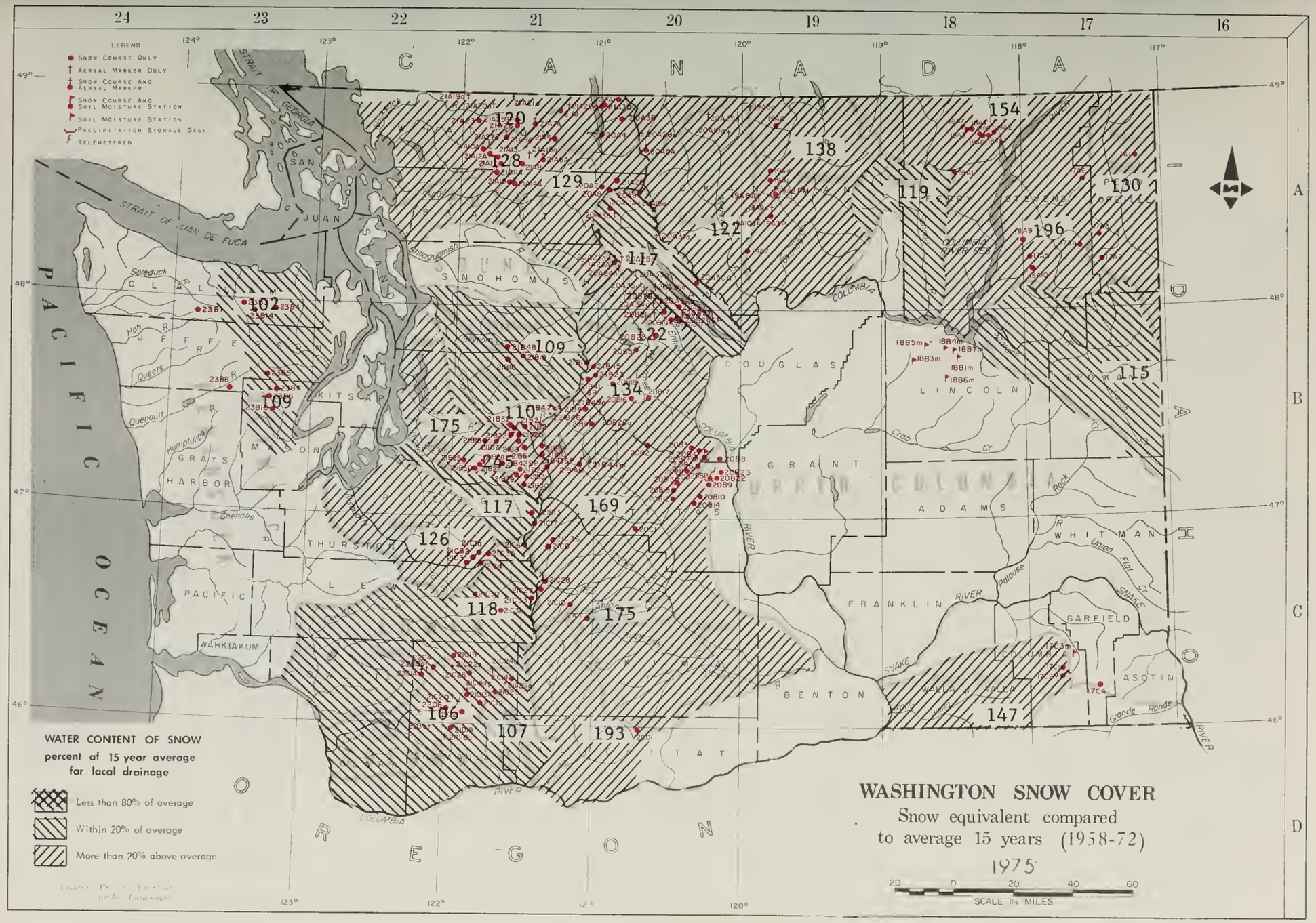
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	31	29N	6W	4500
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1975
SCALE IN MILES
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Snow Course Only
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WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
PACIFIC OCEAN
OREGON
IDAHO
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
THURSTON
PACIFIC
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DOUGLAS
LINCOLN
SPOKANE
GRANT
ADAMS
WHITMAN
FRANKLIN
GARFIELD
COLUMBIA
ASOTIN
BENTON
WALLA WALLA
COLUMBIA RIVER
SNAKE RIVER
Soleduck
Hoh R
Queets
Quenault
Humptulips
Chehalis
Skillaguamish
Palouse
Union Flat Cr
Grande Ronde
Crab Cr
Rock
120
128
129
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Snow Caps Trail	18A6	5	38N	36E	2720
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Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
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Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpail River					
Sherman Creek Pass	18A1	19	36N	35E	5350
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Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
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Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20828a	19	28N	18E	5425
Brief	20819	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20827a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20820	22	29N	18E	4300
Pope Ridge Snow Pillow	20824SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21823	7	26N	15E	3170
Berne-Mill Creek (New)	21841SP	13	26N	14E	3240
Blewett Pass No. 2	2082	35	22N	17E	4270
Chiwaukum G. S.	20816	4	25N	17E	1810
Lake Wenatchee	2085	33	27N	17E	1970
Leavenworth R. S.	20817	1	24N	17E	1127
Merritt	20818	4	26N	16E	2140
Stevens Pass	2181	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	2082SSP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20823	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	2086	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	1881m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	1884m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20810	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20811	29	21N	19E	5385
High Creek	20812	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21814M	15	20N	14E	2200
Lemah Creek	21847a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20813	4	20N	19E	3875
Trail Creek	20814	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20826a	16	23N	15E	5925
Walters Flat	20815	22	20N	19E	3360
Waptus Lake	21849a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	2101Ba	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21813	30	18N	11E	6000
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21842SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21828	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21831	5	19N	11E	4700
Snowshoe Butte	21843SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21830	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21821	30	22N	10E	3300
Mt. Gardner Aux.	21822	31	22N	10E	2500
Mt. Lindsay	21816	31	22N	9E	2500
Mt. Washington New	21852	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	2186	24	21N	10E	3000
Tinkham Creek	21820	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Ollallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21818	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	31	29N	6W	4500
Elwha River					
Hurricane	2383	36	29N	7W	4500
Skokomish River					
Black and White	2387	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900
Soleduck River					
Deer Lake	2381	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow

STREAMFLOW FORECASTS - APRIL 1975

he following summarized runoff forecasts are based principally on mountain snow-over and on the assumption that precipitation and temperature will be near average rom the present time to the end of the forecast period. Appreciable deviations rom normal of temperature and/or precipitation will correspondingly modify these orecasts. Streamflow figures for 1974 are preliminary and subject to revision.

asin, Stream and Station	Forecast Runoff 1975	Seasonal % 15-Yr. Avg.	Streamflow in Thousands of Acre-Feet Fore-cast period	1974	1973	1972	15-Yr Average 58-72
			COLUMBIA BASIN				
olumbia River System							
olumbia River	45700	98	Apr-Sep	54227	34796	56680	46430
at Birchbank 1/	36800	98	Apr-Jul	44492	27876	46587	37548
	26200	95	Apr-Jun	31893	20203	34333	27549
olumbia River	71000	103	Apr-Sep	85139	45849	85860	68868
at Grand Coulee 1/	60500	104	Apr-Jul	73671	38193	73431	58379
	46800	102	Apr-Jun	57033	29886	57727	46060
olumbia River	78400	104	Apr-Sep	96939	49117	97430	75337
bl Rock Island Dam 1/	65800	103	Apr-Jul	84480	41200	84085	64192
	52000	103	Apr-Jun	65246	32032	66051	50604
olumbia River	110000	105	Apr-Sep	139724	65162	135452	104670
at The Dalles, Or 1/	94000	105	Apr-Jul	123569	54260	118552	89893
	76500	105	Apr-Jun	99282	43395	96933	73158
end Oreille River System							
end Oreille River	16400	103	Apr-Sep		8311	20294	15953
bl. Box Canyon	15000	102	Apr-Jul		7614	18724	14688
	12750	100	Apr-Jun		6756	16109	12777
ettle River System							
ettle River	2160	115	Apr-Sep	2831	1121	2289	1873
nr. Laurier	2090	116	Apr-Jul	2752	1093	2205	1793
	1850	113	Apr-Jun	2476	1020	1965	1640

/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Forecast Period	1974	1973	1972	15-Y Avera 58-7
		Seasonal Streamflow in Thousands of Acre-Feet					
Kettle River System (Cont.)							
Colville River							
at Kettle Falls	150	101	Apr-Sep	286	54	114	148
	140	102	Apr-Jul	269	50	103	137
	130	102	Apr-Jun	252	48	94	128
Spokane River System *							
Spokane River	3350	112	Apr-Sep		1140	4002	2983
at Post Falls, ID 2/	3250	112	Apr-Jul		1082	3875	2899
	3100	112	Apr-Jun		1022	3644	2773
Okanogan River System							
Similkameen River	1880	124	Apr-Sep	2216	736	3259	1517
nr. Nighthawk	1770	124	Apr-Jul	2092	697	3090	1424
	1520	124	Apr-Jun	1710	621	2568	1222
Okanogan River	2210	128	Apr-Sep	2757	765	3852	1723
nr. Tonasket	2060	130	Apr-Jul	2534	707	3523	1582
	1740	129	Apr-Jun	2029	622	2895	1349
Methow River System							
Methow River	1240	120	Apr-Sep		512	1959	1031
nr. Pateros	1160	120	Apr-Jul		476	1819	963
	1000	120	Apr-Jun		417	1524	832
Chelan River System							
Chelan River	1470	117	Apr-Sep	1765	777	1866	1253
at Chelan 3/	1310	118	Apr-Jul	1524	680	1619	1112
	1040	118	Apr-Jun	1127	544	1250	881
Stehekin River	1040	115	Apr-Sep		541	1235	904
at Stehekin	885	114	Apr-Jul		447	1044	776
	660	110	Apr-Jun		352	772	600
Entiat	280	117	Apr-Sep		145	398	239
nr. Ardenvoir	255	116	Apr-Jul		131	361	220
	210	118	Apr-Jun		113	283	180

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

asin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr. Average 58-72
		Seasonal Streamflow in Thousands of Acre-Feet					
enatchee River System							
enatchee River	1550	118	Apr-Sep	1910	790	1926	1312
at Plain	1390	117	Apr-Jul	1652	709	1686	1187
	1100	115	Apr-Jun	1188	589	1272	956
enatchee River	2070	116	Apr-Sep	2556	1033	2787	1786
at Peshastin	1900	117	Apr-Jul	2232	938	2464	1629
	1540	116	Apr-Jun	1632	786	1883	1324
temilt Basin nr. Wenatchee	145	105	May-Sep			145*	138*
akima River System							
akima River	170	120	Apr-Sep	231	83	213	142
Nr. Martin 4/	155	119	Apr-Jul	214	76	192	131
	130	112	Apr-Jun	170	70	160	116
akima River	1100	114	Apr-Sep		555	1515	965
at Cle Elum 5/	1010	115	Apr-Jul		489	1374	877
	880	115	Apr-Jun		433	1156	764
akima River	2020	117	Apr-Sep		582	3231	1730
nr. Parker 6/	1990	117	Apr-Jul		590	3071	1701
	1850	117	Apr-Jun		598	2694	1580
achess River	150	120	Apr-Sep	207	66	196	125
nr. Easton 7/	140	118	Apr-Jul	193	63	182	118
	125	118	Apr-Jun	156	59	153	106
le Elum River	570	120	Apr-Sep	745	285	750	477
nr. Roslyn 8/	525	120	Apr-Jul	664	255	673	437
	450	121	Apr-Jun	500	220	538	372

Thousands of Miners' inches.
/ Observed flow corrected for storage in Lake Keechelus.
/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
/ Observed flow corrected for storage in Lake Kachess.
/ Observed flow corrected for storage in Lake Cle Elum.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Forecast period	1974	1973	1972	15-Aver 58-
			Seasonal Streamflow in Thousands of Acre-Fee				
Yakima River System (Cont.)							
Bumping River	170	116	Apr-Sep	230	74	228	14
nr. Nile 9/	155	116	Apr-Jul	206	68	203	13
	130	116	Apr-Jun	152	61	155	11
American River	145	113	Apr-Sep		70	186	12
nr. Nile	135	114	Apr-Jul		65	169	11
	110	110	Apr-Jun		58	137	10
Tieton River	275	111	Apr-Sep	405	160	407	24
at Tieton Dam 10/	225	107	Apr-Jul	337	124	342	21
	190	110	Apr-Jun	255	99	267	17
Naches River	980	110	Apr-Sep		442	1477	88
nr. Naches 11/	910	112	Apr-Jul		385	1339	81
	780	112	Apr-Jun		336	1106	69
Ahtanum Creek	50	104	Apr-Sep		21	75	4
nr. Tampico 12/	45	102	Apr-Jul		18	69	4
	40	103	Apr-Jun		16	59	3
Lower Columbia River System							
Mill Creek	32	119	Apr-Sep		17	34	2
nr. Walla Walla	28	117	Apr-Jul		13	29	2
	25	119	Apr-Jun		11	26	2
Lewis River	1340	100	Apr-Sep	1872	800	1597	131
at Ariel 13/	1170	100	Apr-Jul	1684	666	1392	115
	1050	100	Apr-Jun	1420	574	1236	102
Cowlitz River	2320	110	Apr-Sep		1252	3048	210
Blw. Mayfield Dam	2030	110	Apr-Jul		1068	2672	184
	1740	110	Apr-Jun		904	2201	157
Cowlitz River	2940	106	Apr-Sep	4296	1676	3819	276
at Castle Rock 14/	2580	107	Apr-Jul	3850	1419	3331	241
	2210	106	Apr-Jun	3158	1212	2782	208

9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (Combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

Basin, Stream and Station	Forecast Runoff 1975	Seasonal Streamflow in Thousands of Acre-Feet: % 15-Yr. Avg.	Forecast period	1974	1973	1972	15-Yr. Average 58-72
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	175	106	Apr-Sep		120	207	165
nr. Sequim	150	109	Apr-Jul		98	171	137
	115	110	Apr-Jun		74	127	104
PUGET SOUND							
Skagit River System							
Skagit River at Newhalem 15/	2600	115	Apr-Aug	2978	1519	3402	2260
Cedar River System							
Cedar River at Cedar Falls	110	121	Apr-Sep		53	122	91
Green River System							
Green River bl. Howard Hansen Dam	405	130	Apr-Sep	484	165	434	312

15/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about April 1, 1975 as percent of the same date in 1974 and 1973 and average of record

Tributary Basin	No. of Courses Average	1975 Snow Water Expressed as percent of 1974	1973	1958-72 Avg.
UPPER COLUMBIA BASIN				
Pend Oreille	18	104	183	130
Kettle	17	127	160	154
Colville	5	109	288	196
Spokane	16	82	259	115
Okanogan	43	90	163	138
Methow	10	69	157	122
Chelan	5	78	165	117
Entiat	10	80	184	122
Wenatchee	10	85	333	134
Yakima	26	91	248	169
Ahtanum	2	100	157	175
LOWER COLUMBIA				
Mill Creek	3	72	379	147
Klickitat	1	102	-	193
White Salmon	2	65	238	107
Lewis	18	76	246	106
Cowlitz	10	78	221	118
PUGET SOUND				
Nisqually	4	79	201	126
White	3	80	170	117
Green	8	79	292	245
Cedar	7	87	622	175
Snoqualmie	3	64	254	110
Skykomish	3	74	221	109
Skagit	14	104	209	129
Baker	11	90	155	128
Nooksack	5	67	139	120
OLYMPIC PENINSULA				
Skokomish	4	73	157	109
Elwha	1	73	162	102

RESERVOIR STORAGE - 1000 ACRE FEET

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (April) 1975	1974	1973	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	85.5	263.5	83.9	174.1
Columbia	Franklin D. Roosevelt Lake	5232.0	1682.3	-1878.4	1546.3	1821.8
Columbia	Banks Lake	761.8	688.2	690.8	592.0	581.4
Okanogan	Conconully Reservoir	13.0	11.7	7.2	11.8	11.8
Okanogan	Salmon Lake	10.5	9.2	7.4	9.5	7.5
Chelan	Lake Chelan	676.1	62.0	157.0	121.4	179.3
		YAKIMA				
Yakima	Keechelus Lake	157.8	96.1	114.4	112.1	107.8
Kaches	Kachess Lake	239.0	163.8	122.1	196.8	190.2
Cle Elum	Lake Cle Elum	436.9	266.4	225.0	340.5	283.2
Bumping	Bumping Lake	33.7	2.7	5.8	11.7	11.4
Tieton	Rimrock Lake	198.0	128.6	151.2	160.8	141.7
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	531.4	785.7	734.2	768.5
Skagit	Diablo Reservoir	90.6	85.3	83.8	87.5	85.5
Skagit	Gorge Reservoir	9.8	8.2	8.2	8.4	-

1/ Based on Active Storage

* 15-year Average 1958-72

SOIL MOISTURE - APRIL

rainage Basin nd tation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of April 1 1975	1974	1973
KANOGAN							
almon Meadows	19A2M	4500	48	5.4	3.1	3.7	3.0
rout Creek	3-M	3600	48	7.3	3.4	4.2	3.7
AKIMA							
omery Flat	21B20m	2200	48	6.9	-	4.9	5.2
ake Cle Elum	21B14M	2200	48	12.8	-	9.3	9.2
ALLA WALLA							
ouse	17C3m	3650	48	11.1	9.4	10.3	7.6
elmers	17C2M	4400	48	12.0	11.2	10.1	10.6
ENATCHEE							
pper Wheeler	20B7M	4400	48	12.7	8.6	11.1	8.9

FALL SOIL MOISTURE

rainage Basin nd tation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1974	1973	1972
KANOGAN							
almon Meadows	19A02M	4500	48	5.4	1.8	2.6	2.8
rout Creek	3-M	3600	48	7.3	3.0	2.8	3.3
AKIMA							
omery Flat	21B20m	2200	48	6.9	-	2.6	4.1
ake Cle Elum	21B14M	2200	48	12.8	-	6.1	8.7
ALLA WALLA							
ouse	17C3m	3650	48	11.1	-	5.6	6.0
elmers	17C2M	4400	48	12.0	-	7.6	7.7
ENATCHEE							
pper Wheeler	20B7M	4400	48	12.7	5.4	6.0	5.8

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct Observed	1974 2/ Departure	WINTER Nov. 1974 - Mar. 1975 Observed	2/ Departure
Columbia in Canada	1.22	-3.25	13.42	+0.67
Pend Oreille - Spokane	0.71	-3.77	21.69	+2.99
Northeastern Washington	0.30	-2.48	14.78	+3.67
Southeastern Washington	0.31	-2.92	15.27	+1.80
Central Washington	1.21	-3.54	31.75	+4.22
North Central Washington	0.37	-1.25	7.93	+1.21
Northwest Slope Cascades	3.25	-9.44	59.41	+7.18
Southwest Slope Cascades	2.49	-6.19	44.71	+3.07

Northeastern Washington - Lower Spokane, Colville, Sanpoil and lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

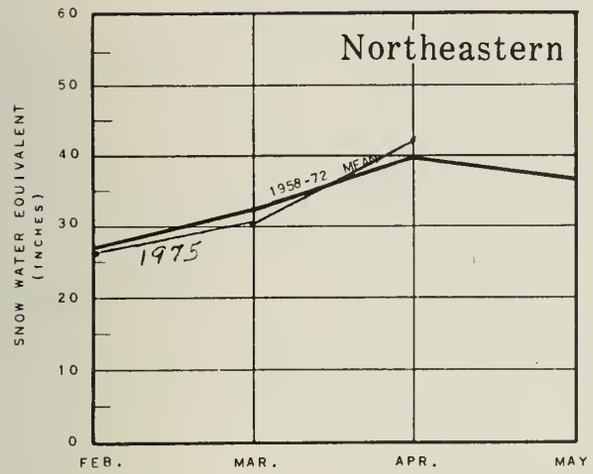
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

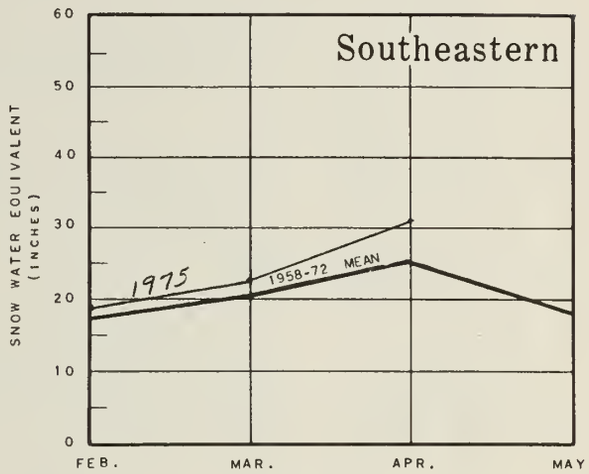
2/ - Departure from 15-year (1958-72) drainage division average.

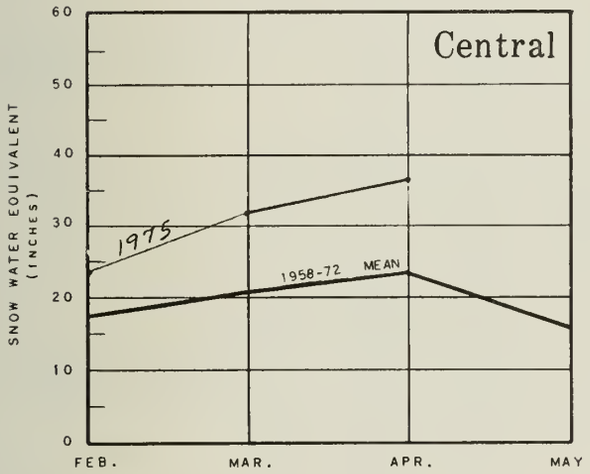
WASHINGTON SNOW COVER

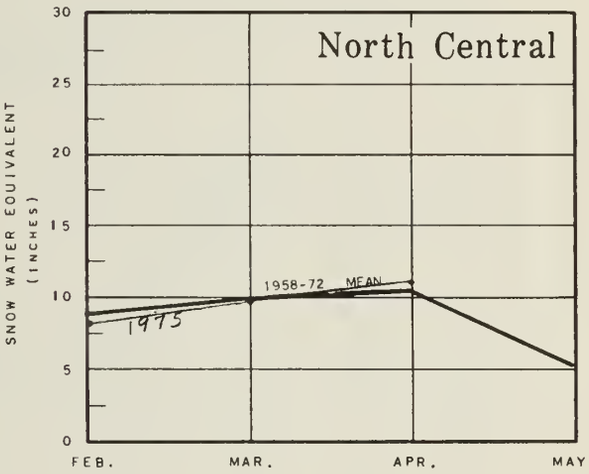
1975

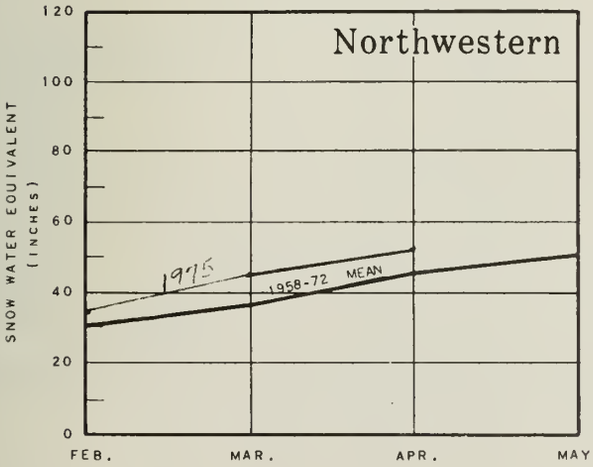
DRAINAGE AREAS

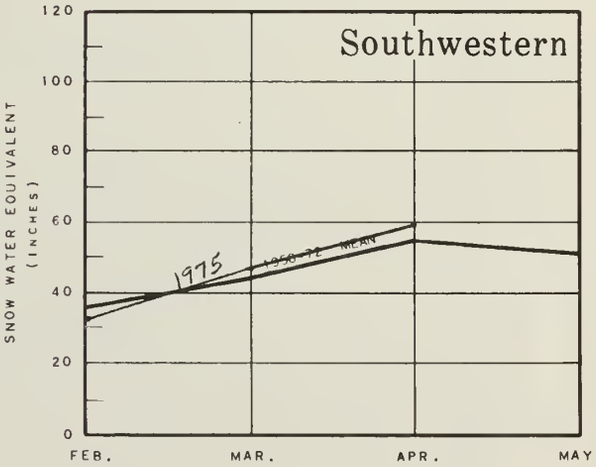










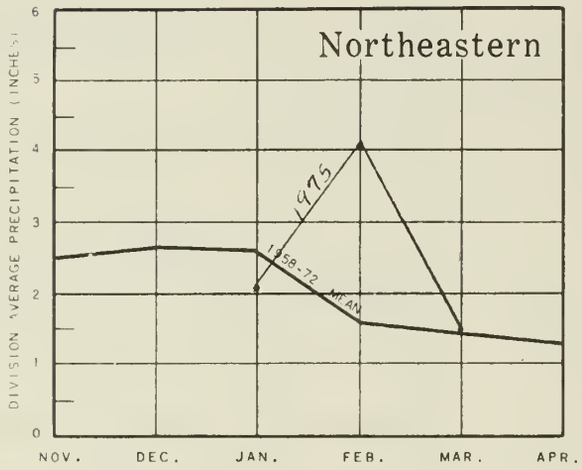


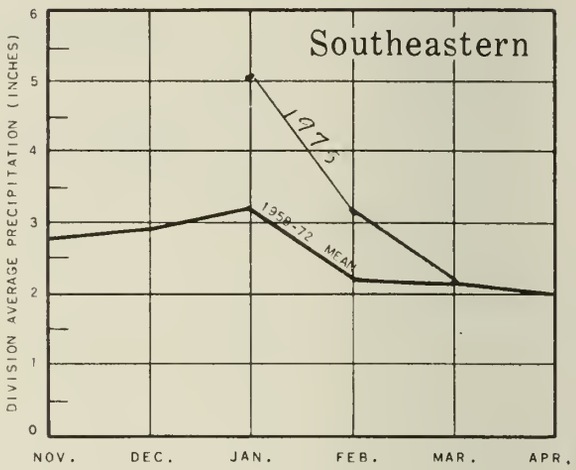
Selected Snow Survey Courses by Soil Conservation Service

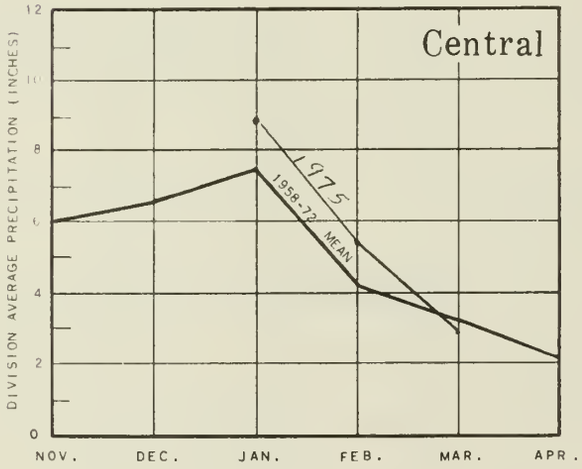
WASHINGTON VALLEY PRECIPITATION

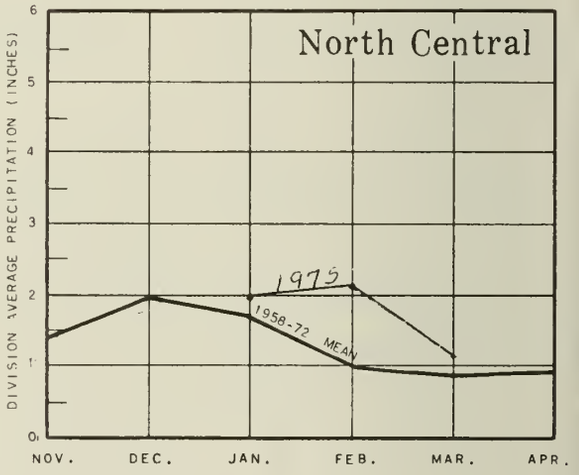
1975

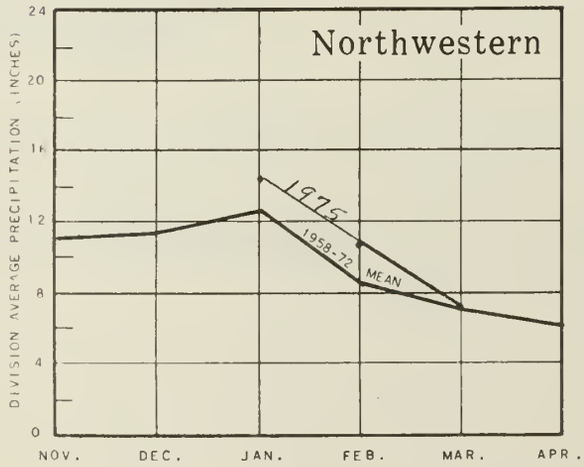
DRAINAGE AREAS

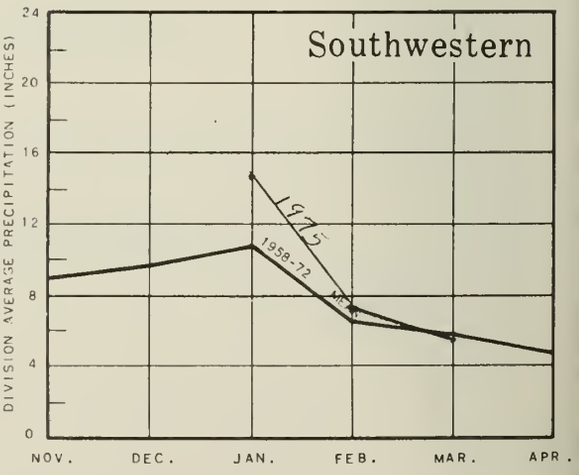






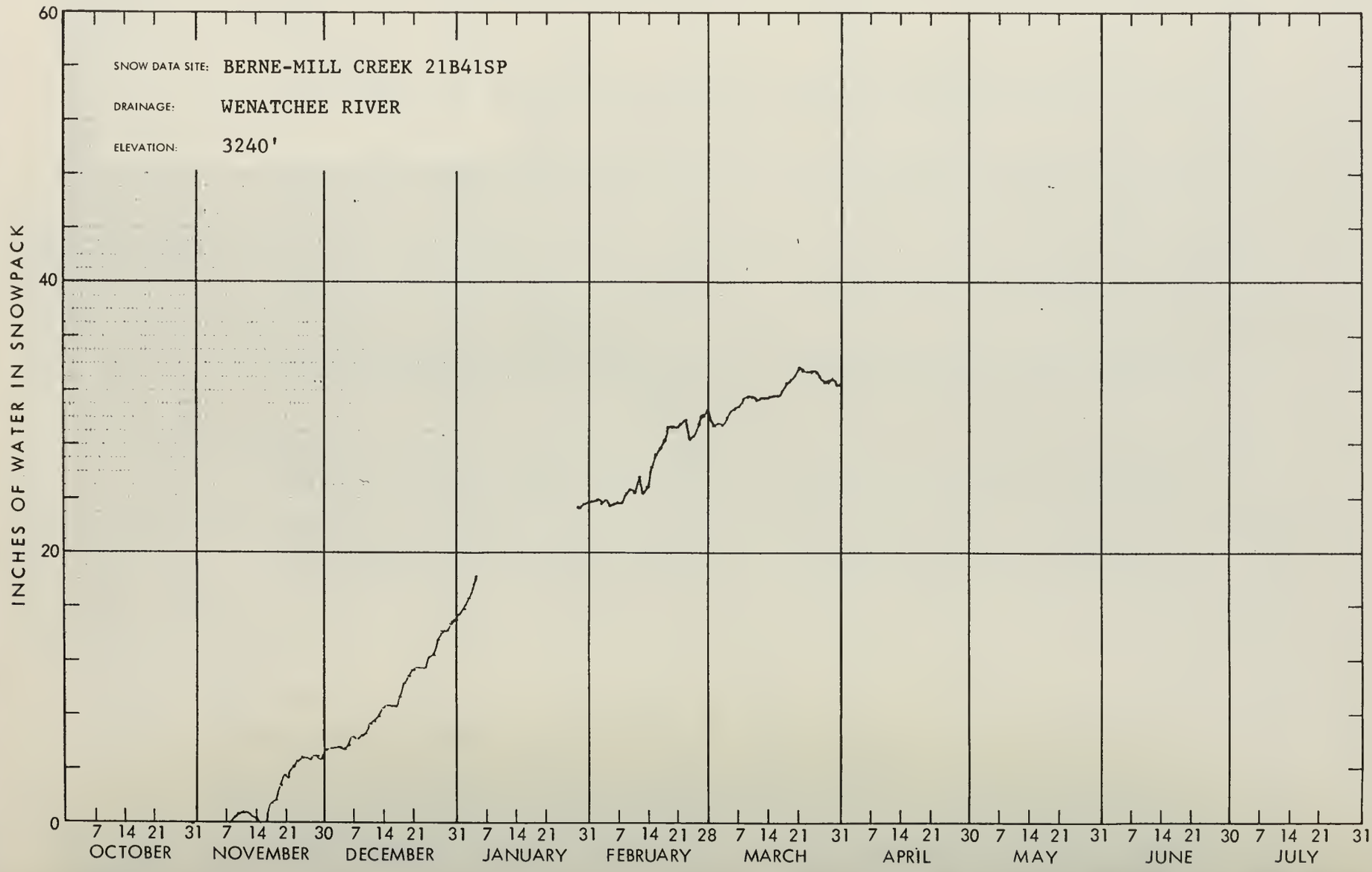






Preliminary Analysis by National Weather Service

WSFB-X13C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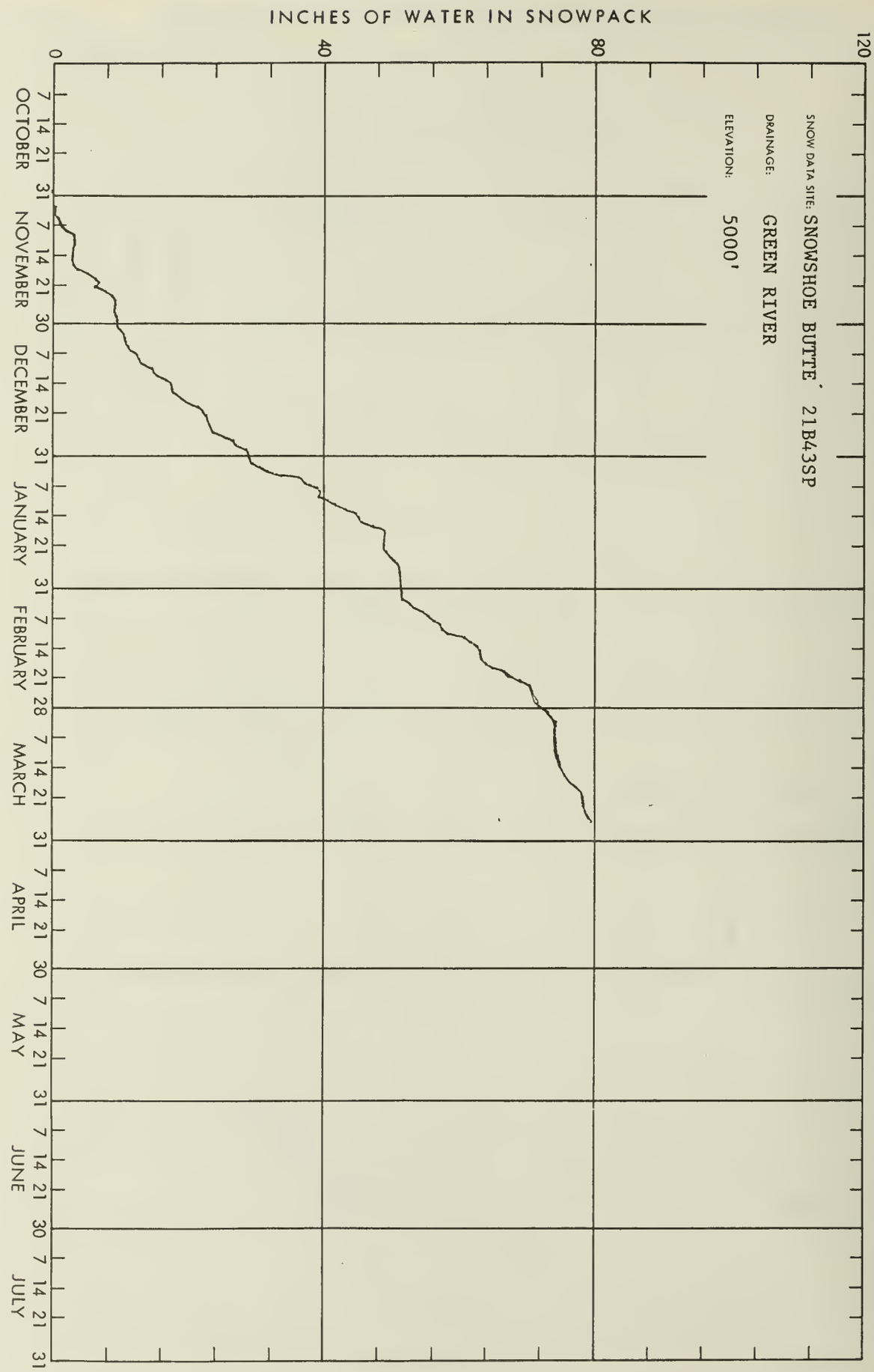
DRAINAGE: WENATCHEE RIVER
ELEVATION: 3240'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY


WSFB-X13D
SNOW DATA SITE: SNOWSHOE BUTTE 21B43SP
DRAINAGE: GREEN RIVER
ELEVATION: 5000'
INCHES OF WATER IN SNOWPACK
120
80
40
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

SNOW DATA TO APRIL 1, 1975 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	4/1	144	59.1	75.0	49.4
Baree Midway	15B16	4600	4/1	125	49.8	54.1	37.7
Baree Trail	15B15	3800	4/2	45	15.3	15.4	9.6
Benton Meadow	16A02	2344	3/28	26	8.8	2.4	3.4
Benton Spring	16A03	4900	3/28	72	23.8	32.1	19.4
Boyer Mountain	17A02	5250	3/28	94	33.2	41.6	27.9
Brush Creek Timber	14A13	5000	3/26	43	12.6	13.0	-
Bunchgrass Meadow	17A01	5000	3/28	96	36.1	46.2	31.4
Chewelah	17A04	4923	3/29	64	21.0	-	18.5
Heart Lake Trail	14C10	4800	4/1	86	28.7	33.0	23.4
Hoodoo Basin	15C10	6000	4/1	149	56.8	73.6	53.8
Hoodoo Creek	15C01	5900	4/1	142	51.7	67.7	50.3
Lookout	15B02	5250	3/28	119	42.4	47.1	38.1
Mosquito Ridge	16A04A	5100	3/31	119	46.0	57.6	40.3
Nelson	19-Can	3050	3/27	61	20.1	20.8	15.7*
Schweitzer Bowl	16A06	4500	3/27	115	40.5	45.3	31.7
Schweitzer Ridge	16A05	6100	3/27	172	70.4	66.0	48.3
Smith Creek	16A01	4800	4/2	149	55.4	70.5	48.5
Winchester Creek	17A03	2970	3/26	50	15.4	13.2	11.8
KETTLE RIVER							
Barnes Creek	90-Can	5300	3/30	65	22.1	23.6	21.2*
Big White Mtn.	154-Can	5500	3/31	72	27.0	30.0	19.8*
Boulder Road	18A02	1450	3/27	12	4.3	1.6	2.6
Butte Creek	18A03	4070	3/27	45	12.3	14.3	10.1
Cabin Creek	18A08	3170	3/27	36	10.5	10.8	9.2
Carmi	126-Can	4100	3/31	34	11.4	8.6	6.3*
Farron # 1	17-Can	4000	3/26	54	15.3	18.8	13.4*
Farron # 2	243-Can	4000	3/26	54	16.2	18.9	New
Goat Creek	18A04	3595	3/27	31	9.0	8.9	6.0
Graystoke Lake	5-Can	5950	3/26	62	20.2	28.5	23.1*
Monashee Pass	48A-Can	4500	3/30	48	15.9	15.8	14.1*
Old Glory Mtn.	42-Can	7000	3/31	100	36.8	48.6	28.3*
Snow Caps Creek	18A05	2150	3/27	14	5.3	1.8	2.3
Snow Caps Trail	18A06	2720	3/27	22	7.1	5.9	5.7
Summit G. S.	18A07	4600	3/27	40	11.7	10.4	8.6
Trapping Creek Lower	166-Can	3050	3/31	45	15.2	5.4	3.3*
Trapping Creek Upper	165-Can	4450	3/31	25	8.6	14.4	9.5*

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COLVILLE RIVER							
Baird	17A06	3215	3/28	39	11.8	9.3	5.7
Carlson	18A09	2885	3/29	26	9.6	0.0	2.6
Chewelah	17A04	4925	3/29	64	21.0	-	18.5
Stranger Mountain	17A05	4990	3/29	57	18.7	22.6	14.6
Togo	18A10	3370	3/29	61	20.0	17.0	12.5
SPOKANE RIVER							
Above Burke	15B08	4100	3/28	87	32.2	31.3	25.6
Above Roland	15B07	4350	3/31	107	40.9	50.2	35.8
Below Roland	15B06	3770	3/31	55	20.2	21.8	17.4
Copper Ridge	16B02	4800	3/27	97	38.0	41.6	30.1
Forty-nine Meadows	15B03	5000	3/28	103	30.6	41.8	34.9
Fourth of July Summit	16B03	3100	3/28	40	13.7	14.2	7.8
Granite Peak	15B13A	6000	3/28	144	43.2	59.0	47.5
Kellogg Peak	16B05A	5560	3/31	107	40.4	52.9	34.7
Lookout	15B02	5250	3/28	119	42.4	47.1	38.1
lost Lake	15B14A	6000	3/28	186	63.2	89.2	62.1
Lower Sands Creek	16B01	3400	3/27	64	22.2	31.2	20.7
Medicine Ridge	15B04A	6150	3/28	143	43.8	60.6	48.1
Mosquito Ridge	16A04A	5110	3/31	119	46.0	57.6	40.3
Roland Summit	15B05A	5200	3/31	118	44.8	59.5	39.2
Sherwin	16C01	3200	3/27	57	20.8	22.7	13.8
Sunset	15B09A	5600	3/31	115	41.8	52.0	39.3
SANPOIL RIVER							
Sherman Creek Pass	18A01	5350	3/27	61	18.5	24.3	15.5
OKANOGAN RIVER							
Aberdeen Lake	6-Can	4300	3/30	35	10.2	6.8	6.1*
Blackwall Peak	100-Can	6250	3/27	94	35.4	49.3	35.3*
Bouleau Creek	31-Can	5000	3/31	52	17.9	16.9	12.0*
Bouleau Lake	234-Can	4580	3/29	62	22.0	20.3	16.3*
Brenda Mine	193-Can	4800	3/27	55	18.1	19.1	14.0*
Brookmere	27-Can	3200	3/27	42	11.5	11.2	9.8*
Carrs Landing Upper	168-Can	3200	3/29	25	7.9	4.1	3.2*
Clark +	19A08a	7000	3/31	84	30.2	42.2	23.3
Enderby	130-Can	6250	3/28	112	32.1	58.2	38.9*
Esperon Creek Lower	164-Can	4400	3/31	50	16.9	18.1	12.9*
Esperon Creek Middle	163-Can	4700	3/31	58	21.2	23.9	15.9*
Esperon Creek Upper	162-Can	5400	3/31	68	25.5	31.7	19.5*
Freezeout Meadows New	20A38	5000	3/27	110	43.0	82.5	29.9

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1975

SNOW DATA TO APRIL 1, 1975 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Graystoke Lake	5-Can	5950	3/26	62	20.2	28.5	23.1*
Hamilton Hill	107-Can	4900	3/26	56	17.7	18.6	16.0*
Harts Pass	20A05A	6500	3/27	131	50.7	70.1	47.2
Horseshoe Basin +	19A05a	7000	3/31	64	23.7	26.6	13.5
Isintok Lake	152-Can	5510	3/29	37	11.6	13.4	8.1*
Lost Horse Mountain	105-Can	6300	Late Report			14.6	9.1*
Loup Loup	19A07	4650	3/28	39	12.3	17.3	9.3
McCulloch	4-Can	4200	3/22	37	10.0	9.8	6.7*
Missezula Mountain	106-Can	5100	3/27	43	12.9	14.2	8.4*
Mission Creek	5A-Can	6000	3/26	74	25.3	29.8	20.0*
Monashee Pass	48A-Can	4500	3/30	48	15.9	15.8	14.1*
Mount Kobau	156-Can	5950	4/1	47	14.9	23.7	13.6*
Muckamuck +	19A09a	6390	3/31	55	19.8	30.7	17.8
Mutton Creek No. 1	19A01	5700	3/27	57	16.4	28.4	14.2
Mutton Creek No. 2	19A04	6000	3/27	50	15.6	26.8	15.4
Mutton Creek No. 2 SP	19A11SP	6000	3/28	-	12.5	22.6	New
New Copper Mountain	46A-Can	4300	3/28	26	7.0	7.0	5.3*
New Penticton Res. #2	183-Can	5225	4/1	42	9.5	13.0	8.8*
Nickel Plate Mtn.	47-Can	6200	3/29	34	11.6	12.3	7.9*
Oyama Lake	203-Can	4400	3/31	34	9.8	9.0	7.5*
Paysayten +	20A28a	4300	3/31	64	23.7	20.4	16.0
Postill Lake	55-Can	4500	3/31	37	12.3	13.7	8.9*
Quartette Lake	34-Can	4000	3/28	43	11.3	16.1	15.1*
Rusty Creek	19A03	4000	3/26	35	9.5	13.4	7.0
Salmon Meadows	19A02	4500	3/28	43	11.2	18.7	10.3
Silver Star Mountain	99-Can	6050	3/28	89	35.1	43.9	27.7*
Starvation Mtn. +	19A10a	6750	3/31	65	23.4	31.1	21.9
Summerland Reservoir	3A-Can	4200	3/31	46	15.1	12.6	9.3*
Touts Coulee	19A06	2845	3/27	14	4.5	2.9	1.1
Trout Creek	3-Can	4700	3/29	40	12.1	9.6	7.5*
Vaseux Creek	233-Can	4600	3/28	35	8.4	8.6	7.7*
White Rocks Mountain	70-Can	6000	3/26	90	36.5	40.2	22.9*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	3/28	126	47.9	57.8	New
Brief	20B19	1600	3/22	21	8.0	0.0	4.0
Entiat Meadows +	20A33a	4800	3/28	138	52.4	72.4	48.1
Entiat River Trail +	20A34a	3150	3/28	79	27.6	28.9	21.3
Four Mile Ridge +	20B27a	7000	3/28	100	38.0	51.6	-
Fox Camp +	20A36a	6510	3/28	154	58.5	75.7	59.0
Pope Ridge	20B20	4300	3/25	70	24.5	28.3	16.9
Pugh Ridge +	20A32a	6400	3/28	105	36.8	58.7	39.6
Shady Pass	20A37	6200	3/26	93	35.7	45.1	-
Snow Brushy +	20A35a	3850	3/28	129	45.2	52.8	40.9
Tommy Creek +	20B21a	5300	3/28	84	31.9	39.1	27.1

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 4

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
METHOW RIVER							
Billy Goat Pass +	20A10a	6409	3/31	94	34.8	44.4	32.0
Dollar Watch +	20A29a	7000	3/31	89	32.9	40.0	29.3
Harts Pass	20A05A	6500	3/27	131	50.7	70.1	47.2
Horseshoe Basin +	19A05a	7000	3/31	64	23.7	26.6	13.5
Loup Loup	19A07	4650	3/28	39	12.3	17.3	9.3
Mutton Creek No. 1	19A01	5700	3/27	57	16.4	28.4	14.2
Mutton Creek No. 2	19A04	6000	3/27	50	15.6	26.8	15.4
Mutton Creek No. 2 SP	19A11SP	6000	3/27	-	12.5	22.6	New
Rusty Creek	19A03	4000	3/26	35	9.5	13.4	7.0
Salmon Meadows	19A02	4500	3/28	43	11.2	18.7	10.3
War Creek Pass +	20A31a	6500	Drifted Over			56.6	43.5
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	3/25	146	58.4	77.8	54.0
Little Meadows +	20A24a	5275	3/25	148	59.2	79.2	45.8
Lyman Lake	20A23A	5900	3/25	179	72.5	91.6	61.5
Park Creek Ridge	20A12A	4600	3/27	142	55.2	61.6	46.1
Rainy Pass	20A09	4780	3/27	125	46.4	63.2	41.6
Safety Harbor	20A30A	6300	Not Measured			44.3	29.9
War Creek Pass +	20A31a	6500	Drifted Over			56.6	43.5
WENATCHEE RIVER							
Berne-Mill Creek	21B23	3170	3/14	93	37.3	-	-
			3/31	99	40.5	48.0	27.6
Berne-Mill Creek New SP	21B41SP	3240	3/31	83	36.2	42.2	23.3
Blewett Pass No. 2	20B02	4270	3/28	53	21.1	26.0	16.5
Chiwaukum G. S.	20B16	1810	3/14	36	13.6	-	-
			3/31	35	12.2	15.9	10.5
Fish Lake	21B04	3371	3/25	115	43.5	50.6	35.1
Lake Wenatchee	20B05	1970	3/14	48	18.4	-	-
			3/31	43	16.6	18.4	11.9
Leavenworth R. S.	20B17	1127	3/12	8	3.4	1.4	-
			4/1	0	0.0	0.0	0.7
Lyman Lake	20A23A	5900	3/25	179	72.5	91.6	61.5
Merritt	20B18	2140	3/14	63	22.3	-	-
			3/31	61	23.2	22.4	14.9
Stevens Pass	21B01	4070	3/14	146	61.8	83.1	50.8
			3/31	159	64.7	77.0	53.7
Stevens Pass Sand Shed	21B45	3700	3/14	106	42.8	64.8	-
			3/31	114	49.0	60.8	-

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	3/27	34	12.0	15.1	7.8
Scout-A-Vista	20B04	3400	3/27	35	12.3	11.8	6.9
STEMILT CREEK							
Jump-Off	20B08	4450	3/26	37	13.4	12.8	8.0
Stemilt Slide	20B06	5000	3/26	52	18.7	12.3	15.5
Upper Wheeler	20B07	4400	3/26	38	15.7	11.4	9.0
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	3/28	50	19.5	20.3	-
Colockum Creek Lower	20B23	4300	3/28	37	12.2	13.5	-
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	3/26	32	13.0	10.6	5.2
Big Boulder Creek	21B09	3200	3/25	78	27.7	39.0	18.0
Blewett Pass No. 2	20B02	4270	3/28	53	21.1	26.0	16.5
Bumping Lake	21C08	3450	3/21	68	21.6	27.9	16.9
			3/31	58	20.9	28.2	16.2
Bumping Lake New	21C36	3400	3/21	85	27.9	34.6	21.4
			3/31	73	26.5	36.2	20.7
Cayuse Pass	21C06	5300	3/27	245	97.9	129.9	90.2
Colockum Pass	20B09	5370	3/31	55	18.9	23.6	17.4
Cooke Creek	20B10	4123	3/31	33	11.6	11.4	5.1
Corral Pass	21B13	6000	3/27	151	54.9	63.7	41.6
Fish Lake	21B04	3371	3/25	115	43.5	50.6	35.1
Green Lake	21C10	6000	3/26	125	36.3	46.8	36.2
Grouse Camp	20B11	5385	Not Measured			25.3	17.1
High Creek	20B12	2930	4/1	21	7.4	8.6	2.3
Joe Lake	21B46a	4624	3/24	217	86.8	98.9	-
Lake Cle Elum	21B14M	2200	3/14	35	13.4	13.0	7.8
			3/28	36	14.2	7.8	4.5
Lemah Creek +	21B47a	3327	3/24	148	56.2	64.5	-
Manashtash	20C01	3935	3/28	25	8.2	7.4	2.2
Morse Lake	21C17	5400	3/28	176	68.6	-	61.9
Nanum	21B39	2340	4/1	39	12.2	13.9	8.2
Olallie Meadows	21B02	3625	3/27	158	59.4	89.1	48.8
Satus Pass	20D01	4030	3/31	49	16.6	16.2	8.6
Stampede Pass SP	21B10	3860	3/16	-	56.6	66.8	41.2
			4/1	-	57.2	61.1	43.4
Trail Creek	20B14	3360	3/31	Trace	0.0	0.0	0.1
Tunnel Avenue	21B08	2450	3/13	81	33.0	36.2	24.0
			3/27	91	35.6	35.8	24.1

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1975

SNOW DATA TO APRIL 1, 1975 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
YAKIMA RIVER (Cont.)							
Van Epps Pass +	20B26a	5925	3/24	146	52.6	74.4	-
Walters Flat	20B15	3360	4/1	27	10.4	10.6	5.3
Waptus Lake +	21B49a	3024	3/24	138	52.4	59.8	-
White Pass (E. Side)	21C28	4500	3/18	92	30.6	39.7	24.7
			4/2	90	32.4	36.9	25.9
White Pass (L. Lake)	21C27	4500	3/28	103	37.9	44.9	31.1
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	3/26	32	13.0	10.6	5.2
Green Lake	21C10	6000	3/26	125	36.3	46.8	36.2
LOWER COLUMBIA DRAINAGE							
ASOTIN CREEK							
Spruce Springs	17C04	5700	3/30	85	31.1	39.5	26.6
MILL CREEK							
Homestead	17C01	4030	4/2	32	13.9	16.9	7.3
Martin Springs	17C02	4400	4/2	57	18.4	25.7	14.2
Tollgate	18D3M	5070	3/26	84	30.7	48.4	25.1
KLICKITAT RIVER							
Satus Pass	20D01	4030	3/31	49	16.6	16.2	8.6
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	3/27	143	51.4	82.7	49.4
Surprise Lakes	21C13A	4250	3/28	150	59.7	87.3	53.9
WIND RIVER							
Old Man Pass	21D19	3100	3/28	63	20.3	32.9	19.7

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
LEWIS RIVER							
Blue Lake +	21C22a	4800	3/27	248	99.2	132.0	84.8
Bob's Trail	21C21	2200	3/28	45	15.5	24.2	15.1
Calamity Ridge +	22D01a	2500	3/28	20	7.0	5.5	5.6
Council Pass +	21C18a	4200	3/27	134	51.5	63.4	42.9
Cultus Creek	21C12	4000	3/27	143	51.4	82.7	49.4
Divide Meadow +	21C29a	5600	3/27	170	66.3	79.2	60.6
Grand Meadow	21C25	3500	3/27	86	32.3	44.1	27.7
Lone Pine Shelter	21C26	3800	3/27	128	44.9	83.2	43.3
Marble Mountain +	22C05a	3200	3/27	83	34.0	68.6	38.2
Mosquito Meadows	21C19	4100	3/27	129	45.3	74.1	44.9
New Muddy River	22C06	2000	3/28	15	5.7	3.4	9.5
Old Man Pass	21D19	3100	3/28	63	20.3	32.9	19.7
Plains of Abraham +	21C1a	4400	3/27	188	73.3	108.9	71.8
Smith Creek Road	22C04	2100	3/28	43	17.1	23.9	17.7
Spencer Meadow +	21C20a	3400	3/28	74	28.1	47.8	25.7
Surprise Lakes	21C13A	4250	3/28	150	59.7	87.3	53.9
Table Mountain +	21C24a	4200	3/27	154	58.5	77.4	48.8
Timbered Pead +	21D18a	3000	3/28	58	20.3	33.1	17.8
COWLITZ RIVER							
Cayuse Pass	21C06	5300	3/27	245	97.9	129.9	90.2
Mosquito Meadows	21C19	4100	3/27	129	45.3	74.1	44.9
Ohanapecosh	21C32	2200	3/27	52	22.6	20.5	15.7
Packwood Lake	21C31	2870	3/27	40	16.6	23.3	13.1
Pigtail Peak	21C33	5900	3/28	183	70.7	84.0	64.7
Plains of Abraham +	21C01a	4400	3/27	188	73.3	108.9	71.8
Potato Hill	21C14	4500	3/27	113	42.4	54.9	33.3
White Pass (E. Side)	21C28	4500	3/18	92	30.6	39.7	24.7
			4/2	90	32.4	36.9	25.9
White Pass (L. Lake)	21C27	4500	3/28	103	37.9	44.9	31.1
Willame Creek	21C30	3250	3/27	96	36.0	55.6	31.4
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	3/27	142	55.7	71.3	48.0
Longmire	21C03	2760	3/27	38	15.3	23.5	10.2
New Paradise Park	21C35	5500	3/27	220	91.0	108.8	74.1
Stem Glade	21C01	5050	3/27	211	85.1	95.6	73.4

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
WHITE RIVER							
Cayuse Pass	21C06	5300	3/27	245	97.9	129.9	90.2
Corral Pass	21B13	6000	3/27	151	54.9	63.7	41.6
Morse Lake	21C17	5400	3/28	176	68.6	-	61.9
GREEN RIVER							
Airstrip	21B24	1800	3/27	23	10.2	0.0	1.3
Charley Creek	21B25	1200	3/27	0	0.0	0.0	0.0
Cougar Mountain SP	21B42SP	3200	3/27	76	33.0	36.6	-
Grass Mtn. No. 2	21B27	2900	3/27	72	26.0	41.7	24.4
Grass Mtn. No. 3	21B28	2100	3/27	36	13.7	1.5	4.4
Lester Creek	21B29	3100	3/27	96	34.4	40.2	27.0
Lynn Lake	21B50	4000	3/27	77	31.3	51.7	-
Sawmill Ridge	21B29	4700	3/27	123	47.8	61.0	41.5
Snowshoe Butte SP	21B43SP	5000	3/27	178	69.4	-	-
Stampede Pass SP	21B10	3860	3/16	-	56.6	66.8	41.2
			4/1	-	57.2	61.1	43.4
Twin Camp	21B30	4100	3/27	95	35.5	44.5	25.9
CEDAR RIVER							
City Cabin	21B03	2390	3/28	65	26.6	31.8	15.5
Mt. Gardner	21B21	3300	3/28	60	26.1	33.5	18.0
Mt. Lindsay	21B16	2500	3/31	62	23.3	24.4	15.9
Mt. Washington	21B15	3000	3/31	40	16.1	16.4	7.5
Rex River	21B17	2400	3/31	72	28.4	33.2	13.5
S. F. Cedar	21B06	3000	3/28	90	34.0	38.3	20.6
Tinkham Creek	21B20	3400	3/28	99	40.0	48.7	23.7
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	3/27	136	56.0	82.0	-
Lake Elizabeth	21B19	2900	3/26	130	47.6	82.8	48.5
Olallie Meadows	21B02	3625	3/27	158	59.4	89.1	48.8
S. F. Tolt	21B18	1900	3/27	11	4.2	0.0	0.8
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	3/26	130	47.6	82.8	48.5
Stevens Pass	21B01	4070	3/14	146	61.8	83.1	50.8
			3/31	159	64.7	77.0	53.7
Stevens Pass S. Shed	21B45	3700	3/14	106	42.8	64.8	-
			3/31	114	49.0	60.8	-

Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 9

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	3/28	57	22.8	18.2	12.6
Beaver Pass	21A01	3680	3/28	95	34.6	56.2	33.7
Brown Top	21A28a	6000	3/27	182	71.8	90.2	-
Cloudy Pass	20A22a	6500	3/25	146	58.4	-	54.0
Devils Park	20A04	5900	3/27	132	51.0	67.2	45.6
Freezeout Cr. Trail	20A01	3500	3/27	48	15.4	19.2	12.5
Freezeout Meadows New	20A38	5000	3/27	110	43.0	82.5	29.9
Granite Creek	21A29A	3500	3/27	65	22.2	24.6	11.4
Harts Pass	20A05A	6500	3/27	131	50.7	70.1	47.2
Klesilkwa	35B-Can	3700	4/1	53	21.6	21.6	15.3*
Lyman Lake +	20A23A	5900	3/25	179	72.5	-	61.5
Meadow Cabins	20A08	1900	3/28	27	10.1	2.8	6.0
New Hozomeen Lake	21A30	2800	3/27	50	16.0	17.8	-
New Tashme	26A-Can	2500	4/1	44	16.9	14.6	10.8*
Quartette Lake	34-Can	4000	3/28	43	11.3	16.1	15.1*
Rainy Pass	20A09A	4780	3/27	125	46.4	63.2	41.6
Thunder Basin	20A07	4200	3/28	102	39.2	35.8	23.9
BAKER RIVER							
Baker Pass +	21A27a	4900	3/29	224	89.6	-	-
Dock Butte	21A11A	3800	3/29	183	74.8	110.6	71.3
Easy Pass	21A07A	5200	3/29	226	96.0	-	87.0
Jasper Pass	21A06A	5400	3/29	239	96.0	-	93.6
Komo Kulshan	21A17	800	3/30	24	10.3	0.0	6.0
Marten Lake	21A09A	3600	3/29	201	80.2	125.0	78.1
Mount Blum +	21A18a	5800	3/29	178	71.2	-	-
Panorama New	21A26	4300	3/13	156	73.2	111.5	-
			4/1	187	70.7	112.0	-
Rocky Creek	21A12A	2100	3/29	97	39.0	51.9	29.2
Schreibers Meadow	21A10A	3400	3/29	175	71.4	104.2	65.6
S. F. Thunder Creek	21A14A	2200	3/30	36	13.9	7.6	5.3
Sulphur Creek	21A13	1600	3/30	47	19.4	18.0	13.6
Three Mile Creek	21A15	4500	3/30	3	1.2	0.0	1.7
Watson Lakes	21A08A	4500	3/29	168	67.6	107.5	71.2
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	3/28	159	60.4	92.2	51.0
Canyon +	21A20a	5100	3/28	183	73.2	115.2	60.0
Glacier Creek	21A23	3700	3/27	81	30.4	43.2	23.4
Panorama New	21A26	4300	3/13	156	73.2	111.5	-
			4/1	187	70.7	112.0	-
Twin Lakes +	21A21a	5200	3/28	218	87.2	121.9	79.1

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO APRIL 1, 1975 - APPENDIX 10

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	4/1	114	43.5	60.9	-
ELWHA RIVER							
Hurricane	23B03	4500	3/30	77	26.7	36.8	26.1
SKOKOMISH RIVER							
Black & White	23B07	4200	3/27	142	49.2	69.5	45.6
Black & White Lakes	23B06	4700	3/27	178	71.8	95.0	68.7
Four Streams	23B10	3000	3/27	121	41.2	56.6	34.7
Home Sweet Home	23B05	5200	3/27	211	82.7	113.7	80.6

Average based on 1958-72 average

USDA SCS PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Conado:

Deportment of Londs, Forests ond Water Resources,
Woter Resources Service, British Columbio

Stotes:

Woshington Stote Deportment of Ecology
Woshington Stote Deportment of Noturol Resources

Federol:

Deportment of the Army
Corps of Engineers
U. S. Deportment of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, Notionol Weother Service
U. S. Department of the Interior
Bonneville Power Administrotion
Bureau of Reclomotion
Geologicol Survey
Notional Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pocific Power ond Light Compony
Puget Sound Power ond Light Compony
Woshington Woter Power Compony

OTHER PUBLIC AGENCIES

Okanogon Irrigotion District
Wenotchee Heights Irrigation District

MUNICIPALITIES

City of Tocomo
City of Seottle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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COOPERATIVE SNOW SURVEYS

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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
MAY 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO 11-P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG 1974

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
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STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201

WATER SUPPLY OUTLOOK

State of Washington
May 1, 1975

It appears that the state of Washington will enjoy another irrigation season without the fear of water shortages. All streams are expected to flow above normal with only a few approaching the dangerous level. Some local tributaries to the major river basins will undoubtedly experience flood damage from localized conditions, but major damage is not expected. The National Weather Service River Forecast Center still expects flooding to occur on the Okanogan River where the flood stage is only 15 feet and the NWS forecast is for a probable peak flow from 15½ feet to 17½ feet. The Methow Drainage is approaching the flood area with a flood stage of 10 feet and a probable discharge between 9 and 11 feet. The Yakima River at Parker is also in this possibility area with a flood stage of 10 feet and probable forecast range between 9 and 10½ feet. The rate and timing of this peak discharge is totally dependent upon the subsequent weather patterns. Continued cold temperatures and above normal precipitation will increase the probability of this flood stage being met and exceeded, together with high abnormal weather during the critical melt period which can cause the peak to exceed indicated ranges. Snow packs generally increased in water equivalent, as well as percentagewise, at the high and medium high elevation areas. Many low elevation snow courses, which are normally bare as of May 1, still have a good snow cover. Precipitation during the month was above normal in the South Eastern and North Central Divisions of the state; normal in the North East; below normal in the Pend Oreille-Spokane, Central, and on the West Slopes of the Cascades. Precipitation in the Columbia Drainage of Canada was very subnormal. Subsequent streamflow during the month was below normal in all instances with the exception of the Palouse River which has a low elevation watershed. Reservoir managers continue to lower reservoir stages in anticipation of the abundant snow melt flows.

SNOW COVER

All drainage basins in the state of Washington were reported to have above normal snow packs as of May 1. The general range is from 20 to 40 percent greater. A few drainages with only one or two snow courses sometimes give abnormal results due to lack of proper coverage, elevationwise. For example, the snow course at Satus Pass on the Klickitat Drainage indicates the snow cover to be 574 percent greater than average. Another drainage with apparently good elevation coverage is the Wenatchee River, measured by 8 snow courses. The snow pack in this area is 14 percent greater than last year, 551 percent greater than was measured in 1973 and 107 percent greater than average. These figures, again, are the result of a good snow pack that extends down to the lower elevations and does not indicate an excessive high elevation snow pack. Stevens Pass has a snow pack that is 84 percent of last year, 220 percent of 1973 and 124 percent of average. The snow course, Berne Mill Creek, a thousand feet less elevation, has a snow cover that is the same as last year, yet 934 percent greater than was measured in 1973. Comparison of snow cover is generally not made on May 1 because of this high fluctuation of snow packs, elevationwise, but in years such as this, with above normal snow cover, it is indicative of what is up in the hills.

RESERVOIRS

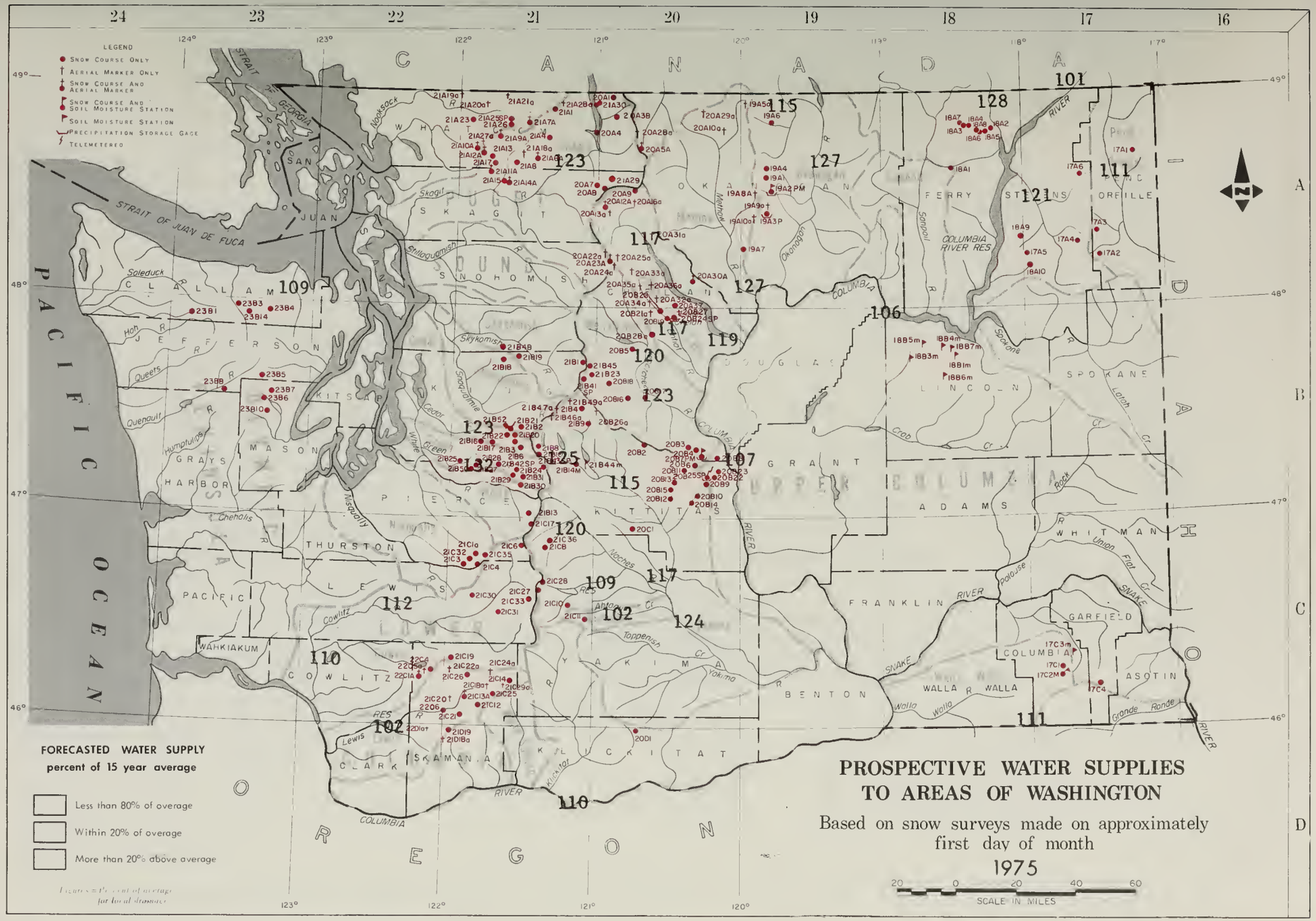
Most irrigation and power reservoirs have less water in storage than normal for this time of year. Exceptions are Banks Lake and Salmon Lake. Most of the reservoirs that were used for power production are exceptionally low, being drawn down during the past "Energy Crunch" to supply the needed power for the northwest. Irrigation reservoirs have also been drawn down, but this, in anticipation of the well above normal spring flows and to assist the flood control agencies in reducing damaging flows along the lower reaches of the rivers.

PRECIPITATION

Winter precipitation, as reported by the National Weather Service, ended up above normal on all drainage divisions in the state and surrounding areas. Spring precipitation starts with April and is reported to be 67 percent below normal for the Columbia in Canada; 16 percent below for the Pend Oreille-Spokane; 38 percent below for central Washington and 37 percent below on the west slopes of the Cascades. North eastern Washington had normal rainfall during the past month and south eastern and north central Washington had rainfall that was 14 and 24 percent above average, respectively.

STREAMFLOW

Flows during the month of April ranged from a low of 39 percent of normal for the Similkameen River, as measured at Nighthawk, to a high of 47 percent above normal for the Palouse. Other low elevation drainages, such as the Klickitat and Walla Walla, had an outflow in the 80 percent of normal bracket. The Okanogan River at Tonasket had an outflow of 88 percent, but this again is a result of the British Columbia Governments attempt to evacuate Okanogan Lake in anticipation of the high inflows. Forecasts of streamflow have all been increased, percentagewise, from that previously reported as a result of the low outflow during April. The May-September forecasts now range from a low of 1 percent above normal for the Columbia River at Birchbank to a high of 32 percent above normal for the Green River below Howard Hansen Dam. The Okanogan River near Tonasket is expected to flow 2,020,000 acre feet during the May-September period. This compares with 2,511,000 acre feet of last year and 3,603,000 for 1972. None of the 1975 runoff forecasts exceeds or comes close to the flows experienced last year or close to the damaging flows which occurred in 1972. Numerical forecasts can be found following this narrative statement.


PROSPECTIVE WATER SUPPLIES
TO AREAS OF WASHINGTON
Based on snow surveys made on approximately
first day of month
1975
SCALE IN MILES
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
COLUMBIA RIVER
COLUMBIA RIVER RES
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
CHELAN
OKANOGAN
FERRY
STEVENS
PEND OREILLE
DOUGLAS
LINCOLN
SPOKANE
GRANT
ADAMS
FRANKLIN
BENTON
WALLA WALLA
COLUMBIA
GARFIELD
ASOTIN
WHITMAN

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18AB	5	38N	36E	3170
Goat Creek	1BA4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Calville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	3BE	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	3BN	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20ASA	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B28a	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	3S	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	1BB3m	2B	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21BB	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	BN	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	B	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	BE	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B2B	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	1B	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skogit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A2Ba	26	40N	12E	6000
Devils Park	20A4	34	3BN	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	3000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	B	36N	BE	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	3BN	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	1B	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

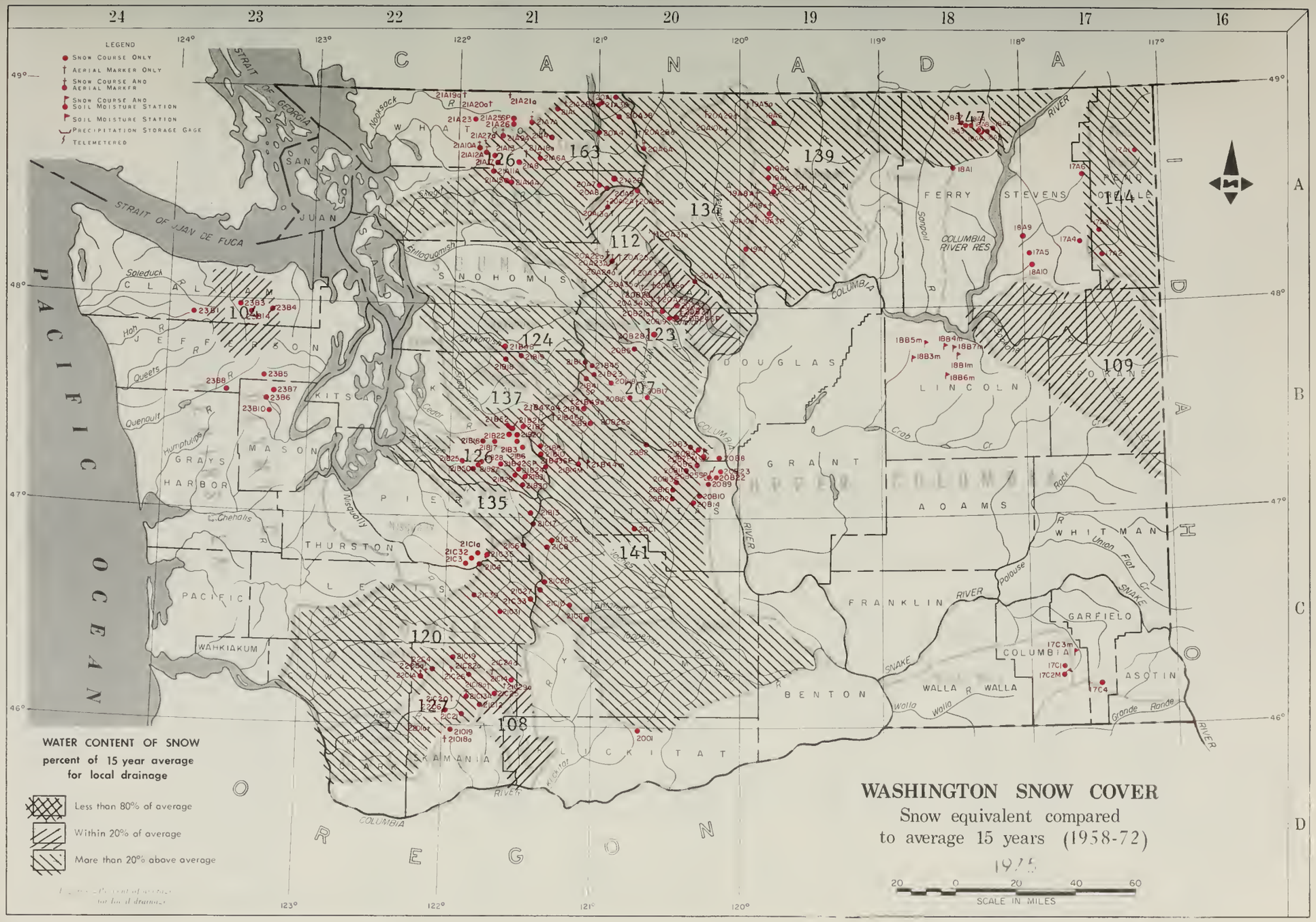
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	31	29N	6W	4500
Elwho River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


WASHINGTON SNOW COVER
Snow equivalent compared
to average 15 years (1958-72)
1975
SCALE IN MILES
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
WATER CONTENT OF SNOW
percent of 15 year average
for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
CANADA
PACIFIC OCEAN
OREGON
IDAHO
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
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KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
PACIFIC
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WAHKIAKUM
CLARK
SKAMANIA
KLICKITAT
YAKIMA
BENTON
FRANKLIN
GRANT
ADAMS
LINCOLN
DOUGLAS
FERRY
STEVENS
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UPPER COLUMBIA DRAINAGE

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Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18AB	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19ABa	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A2Ba	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	B	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	B	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	1B	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20B2Ba	19	28N	18E	5425
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B1B	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SF	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	1B	21N	20E	3400
Stemilt Creek					
Jump-Off	20BB	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	1BB1m	32	27N	34E	2440
Jack Woods	1BB3m	28	27N	31E	2750
Krause	1BB4m	21	27N	33E	2420
Sheffels	1BB5m	17	27N	32E	2378
Sherman	1BB7m	24	27N	33E	2440
Wheatridge	1BB6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Oomery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21BB	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C2B	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	2201a	B	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	2B	8N	9E	3500
Lone Pine Shelter	21C26	B	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21019	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	2101Ba	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
Green River					
Airstrip	21B24	1B	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3860
Twin Camp	21B30	1B	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B4B	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A2Ba	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	B	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A36	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	B	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A1Ba	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	1B	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	1B	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	23B4	1	28N	5W	5200
Morse Creek					
Cox Valley	23B14	31	29N	6W	4500
Elwha River					
Hurricane	23B3	36	29N	7W	4500
Skokomish River					
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23BB	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow

STREAMFLOW FORECASTS - MAY 1975

ne following summarized runoff forecasts are based principally on mountain snow-over and on the assumption that precipitation and temperature will be near average rom the present time to the end of the forecast period. Appreciable deviations rom normal of temperature and/or precipitation will correspondingly modify these orecasts. Streamflow figures for 1974 are preliminary and subject to revision.

asin, Stream and Station	Forecast Runoff 1975	Seasonal Streamflow in Thousands of Acre-Feet % 15-yr. Avg.	Forecast period	1974	1973	1972	15-yr Average 58-72
		COLUMBIA BASIN					
olumbia River System							
olumbia River	43800	101	May-Sep	50321	32773	53667	43514
at Birchbank 1/	35000	101	May-Jul	40586	25853	43573	34632
	25100	102	May-Jun	27987	18180	31319	24633
olumbia River	65700	106	May-Sep	75369	41919	78559	61962
at Grand Coulee 1/	55100	107	May-Jul	63900	34263	66130	51473
	41900	107	May-Jun	47262	25956	50426	39153
olumbia River	72700	107	May-Sep	86002	44972	89350	67934
bl Rock Island Dam 1/	61300	108	May-Jul	37543	37055	76004	56790
	47100	109	May-Jun	54309	27887	57970	43202
olumbia River	101000	110	May-Sep	119784	58016	119815	91599
at The Dalles, Or 1/	85300	111	May-Jul	103630	47114	102914	76822
	67300	112	May-Jun	79342	36249	81295	60087
end Oreille River System							
end Oreille River	15200	111	May-Sep		6929	17909	13737
bl. Box Canyon	13700	110	May-Jul		6338	16336	12471
	11700	111	May-Jun		5507	13725	10561
ettle River System							
ettle River	2070	128	May-Sep	2330	992	2068	1614
nr. Laurier	1950	127	May-Jul	2251	964	1984	1534
	1750	127	May-Jun	1975	892	1744	1381

/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1975	% 15-yr. Avg.	Forecast period	1974	1973	1972	15-Y Avera 58-7
			Seasonal Streamflow in Thousands of Acre-Feet				
Kettle River System (Cont.)							
Colville River	110	121	May-Sep	164	32	76	91
at Kettle Falls	97	121	May-Jul	147	29	65	80
	85	120	May-Jun	130	27	56	71
Spokane River System *							
Spokane River	2550	125	May-Sep		778	3100	2010
at Post Falls, ID 2/	2450	127	May-Jul		720	2973	1926
	2250	125	May-Jun		660	2742	1800
Okanogan River System							
Similkameen River							
nr. Nighthawk	1640	115	May-Sep	2094	688	3118	1425
	1530	115	May-Jul	1970	649	2949	1333
	1300	115	May-Jun	1588	573	2426	1131
Okanogan River	2020	127	May-Sep	2511	704	3603	1587
nr. Tonasket	1850	128	May-Jul	2288	646	3273	1446
	1550	128	May-Jun	1784	561	2646	1213
Methow River System							
Methow River							
nr. Pateros	1200	127	May-Sep		466	1818	946
	1110	126	May-Jul		430	1678	879
	940	126	May-Jun		370	1383	748
Chelan River System							
Chelan River	1360	119	May-Sep	1627	702	1730	1140
at Chelan 3/	1200	120	May-Jul	1386	605	1483	999
	940	122	May-Jun	989	469	1114	767
Stehekin River	970	117	May-Sep		490	1167	830
at Stehekin	820	117	May-Jul		396	975	702
	630	120	May-Jun		301	704	526
Entiat	260	117	May-Sep		132	372	223
nr. Ardenvoir	240	118	May-Jul		118	335	204
	195	118	May-Jun		99	257	165

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.
2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.
3/ Observed flow corrected for storage in Lake Chelan.

sin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr. Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
natchee River System							
natchee River	1400	120	May-Sep	1750	689	1764	1165
at Plain	1260	121	May-Jul	1492	608	1523	1040
	985	122	May-Jun	1028	488	1109	809
natchee River	1950	123	May-Sep	2333	903	2538	1583
at Peshastin	1735	122	May-Jul	2008	808	2216	1426
	1380	123	May-Jun	1409	656	1634	1121
emilt Basin nr. Wenatchee	160*	116	May-Sep			145*	138*
kima River System							
kima River	145	125	May-Sep	204	63	196	116
nr. Martin 4/	130	125	May-Jul	187	55	174	104
	110	124	May-Jun	143	50	143	89
kima River	910	115	May-Sep		441	1328	794
at Cle Elum 5/	830	118	May-Jul		376	1188	706
	700	118	May-Jun		319	969	593
kima River	1650	124	May-Sep		415	2732	1328
nr. Parker 6/	1600	123	May-Jul		423	2572	1298
	1450	123	May-Jun		432	2195	1178
chess River	125	125	May-Sep	179	50	174	100
nr. Easton 7/	115	124	May-Jul	165	46	161	93
	100	123	May-Jun	128	43	132	81
e Elum River	490	120	May-Sep	676	237	679	410
nr. Roslyn 8/	450	121	May-Jul	595	207	603	371
	370	121	May-Jun	431	172	469	306

Thousands of Miners' inches.
Observed flow corrected for storage in Lake Keechelus.
Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
Observed flow corrected for storage in Lake Kachess.
Observed flow corrected for storage in Lake Cle Elum.

Basin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Forecast period	1974	1973	1972	15-Y Avera 58-1
	Seasonal Streamflow in Thousands of Acre-Feet						
Yakima River System (Cont.)							
Bumping River	155	120	May-Sep	213	63	211	129
nr. Nile 9/	145	123	May-Jul	190	57	186	118
	120	125	May-Jun	135	51	138	96
American River	125	112	May-Sep		59	168	112
nr. Nile	115	112	May-Jul		54	151	101
	95	112	May-Jun		47	119	85
Tieton River	235	109	May-Sep	362	140	369	214
at Tieton Dam 10/	200	112	May-Jul	294	104	304	178
	155	112	May-Jun	212	78	229	137
Naches River	875	117	May-Sep		366	1313	748
nr. Naches 11/	800	120	May-Jul		309	1175	669
	670	120	May-Jun		260	942	557
Ahtanum Creek	40	102	May-Sep		16	65	39
nr. Tampico 12/	37	106	May-Jul		14	59	35
	32	106	May-Jun		12	49	30
Lower Columbia River System							
Mill Creek	20	111	May-Sep		13	24	18
nr. Walla Walla	16	114	May-Jul		9	19	14
	13	108	May-Jun		6	15	12
Lewis River	950	102	May-Sep	1409	591	1199	933
at Ariel 13/	800	105	May-Jul	1222	456	993	765
	650	101	May-Jun	958	365	837	641
Cowlitz River	1850	112	May-Sep		1006	2526	1650
Blw. Mayfield Dam	1600	115	May-Jul		822	2149	1397
	1250	111	May-Jun		658	1679	1121
Cowlitz River	2300	110	May-Sep	3410	1322	3036	2093
at Castle Rock 14/	1950	112	May-Jul	2964	1064	2548	1741
	1550	110	May-Jun	2272	857	1999	1407

9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (Combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

asin, Stream and Station	Forecast Runoff 1975	% 15-Yr. Avg.	Fore-cast period	1974	1973	1972	15-Yr. Average 58-72
			Seasonal Streamflow in Thousands of Acre-Feet				
OLYMPIC PENINSULA							
ngeness River System							
ngeness River	160	109	May-Sep		109	183	147
nr. Sequim	130	109	May-Jul		86	146	119
	95	112	May-Jun		62	102	85
PUGET SOUND							
agit River System							
agit River at Newhalem 15/	2500	123	May-Aug		1381	3162	2037
dar River System							
dar River at Cedar Falls	112	123	Apr-Sep		53	122	91
een River System							
een River bl. Howard Hansen Dam	290	132	May-Sep	373	120	342	220

/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about May 1, 1975 as percent of the same date in 1974 and 1973 and average of record

Tributary Basin	No. of Courses Average	1975 Snow Water Expressed As Percent Of 1974	1973	1958-72 Avg.
		UPPER COLUMBIA BASIN		
Pend Oreille	11	96	260	144
Kettle	10	95	194	147
Spokane	8	85	208	109
Okanogan	30	83	201	139
Methow	7	72	190	134
Chelan	1	82	151	112
Entiat	10	72	213	123
Wenatchee	8	114	651	207
Yakima	14	82	354	141
		LOWER COLUMBIA		
Klickitat	1	164	-	674
White Salmon	2	64	278	108
Lewis	16	69	241	127
Cowlitz	6	74	277	120
		PUGET SOUND		
Nisqually	4	74	222	-
White	2	76	208	135
Green	3	94	214	126
Snoqualmie	1	72	365	137
Skykomish	2	83	309	124
Skagit	12	90	221	163
Baker	10	77	175	126
Nooksack	1	57	146	-
		OLYMPIC PENINSULA		
Skokomish	3	71	144	-
Elwha	1	90	204	104

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (May) 1975	1974	1973	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	85.5	263.5	83.9	174.1
Columbia	Franklin D. Roosevelt Lake	5232.0	312.1	-1948.0	-42.5	1654.6
Columbia	Banks Lake	761.8	550.7	548.2	319.0	457.7
Okanogan	Conconully Reservoir	13.0	11.0	10.1	11.2	11.2
Okanogan	Salmon Lake	10.5	9.5	9.9	9.9	7.8
Chelan	Lake Chelan	676.1	79.0	188.5	195.2	225.1
		YAKIMA				
Yakima	Keechelus Lake	157.8	99.5	116.5	127.0	121.2
Kachess	Kachess Lake	239.0	176.5	149.8	188.4	199.2
Cle Elum	Lake Cle Elum	436.9	276.6	249.7	319.0	310.9
Bumping	Bumping Lake	33.7	3.0	8.4	16.8	16.1
Teiton Rimrock Lake		198.0	134.8	144.3	131.5	146.9
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	385.9	700.2	722.2	751.2
Skagit	Diablo Reservoir	90.6	86.9	85.7	88.4	85.7
Skagit	Gorge Reservoir	9.8	7.9	7.9	8.4	-

1/ Based on Active Storage

* 15-year Average 1958-72

SOIL MOISTURE - MAY

ainage Basin d ation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of May 1 1975	1974	1973
ANOGAN							
lmon Meadows	19A2M	4500	48	5.4	3.8	3.8	3.7
out Creek	3-M	3600	48	7.3	-	5.6	4.3
KIMA							
mery Flat	21B20m	2200	48	6.9	-	4.8	4.8
ke Cle Elum	21B14M	2200	48	12.8	-	9.1	9.1
LLA WALLA							
use	17C3m	3650	48	11.1	-	-	7.4
lmers	17C2M	4400	48	12.0	-	-	9.9
NATCHEE							
per Wheeler	20B7M	4400	48	12.7	12.4	13.0	9.2

FALL SOIL MOISTURE

ainage Basin d ation	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1974	1973	1972
ANOGAN							
lmon Meadows	19A02M	4500	48	5.4	1.8	2.6	2.8
out Creek	3-M	3600	48	7.3	3.0	2.8	3.3
KIMA							
mery Flat	21B20m	2200	48	6.9	-	2.6	4.1
ke Cle Elum	21B14M	2200	48	12.8	-	6.1	8.7
LLA WALLA							
use	17C3m	3650	48	11.1	-	5.6	6.0
lmers	17C2M	4400	48	12.0	-	7.6	7.7
NATCHEE							
per Wheeler	20B7M	4400	48	12.7	5.4	6.0	5.8

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct 1974 2/ Observed	Departure	Nov. 1974--Mar. 1975 Observed	Departure	SPRING April - 1975 Observed	Depart
Columbia in Canada	1.22	-3.25	13.42	+0.67	0.49	-0.9
Pend Oreille - Spokane	0.71	-3.77	21.69	+2.99	1.93	-0.3
Northeastern Washington	0.30	-2.48	14.78	+3.67	1.44	-0.0
Southeastern Washington	0.31	-2.92	15.27	+1.80	2.32	+0.2
Central Washington	1.21	-3.54	31.75	+4.22	1.36	-0.8
North Central Washington	0.37	-1.25	7.93	+1.21	1.10	+0.2
Northwest Slope Cascades	3.25	-9.44	59.41	+7.18	4.15	-2.2
Southwest Slope Cascades	2.49	-6.19	44.71	+3.07	2.76	-1.8

Northeastern Washington - Lower Spokane, Colville, Sanpoil and Lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

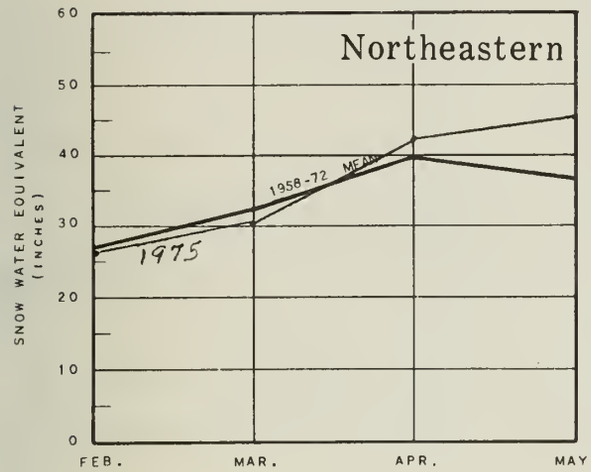
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

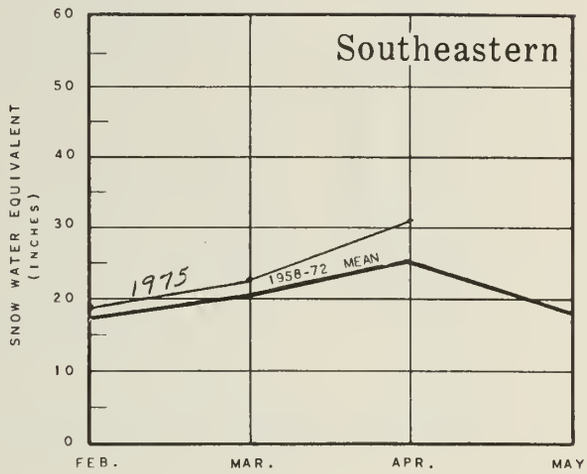
2/ - Departure from 15-year (1958-72) drainage division average.

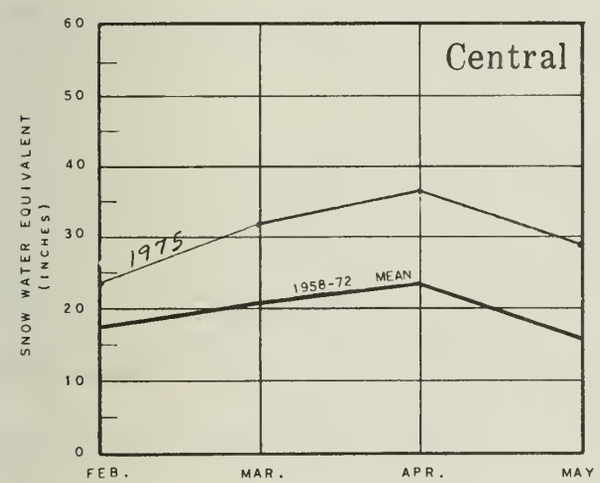
WASHINGTON SNOW COVER

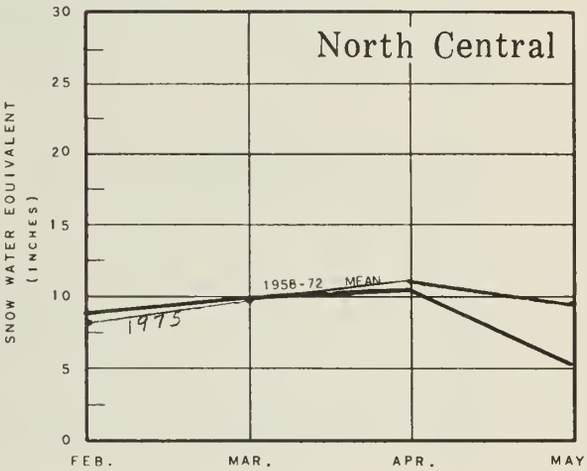
1975

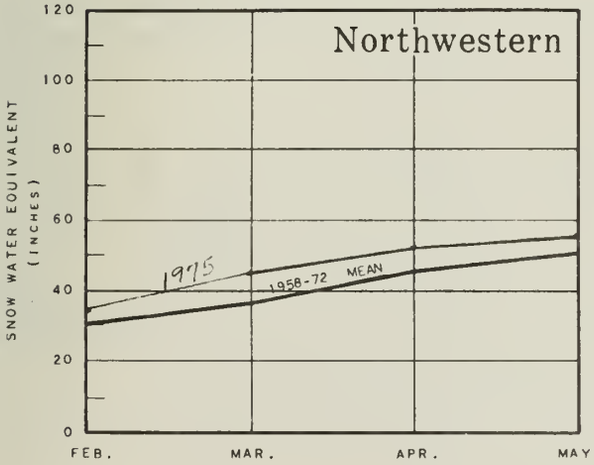
DRAINAGE AREAS

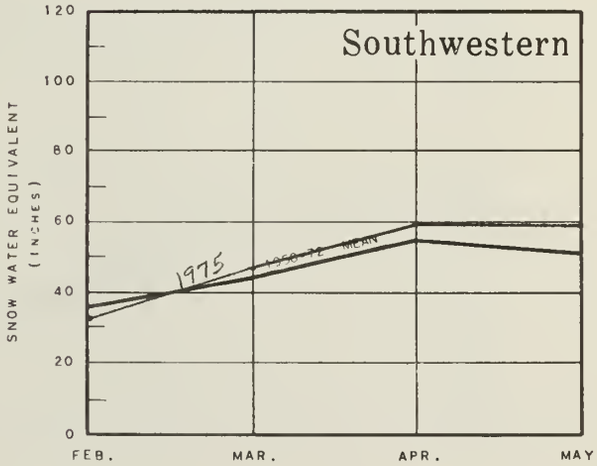










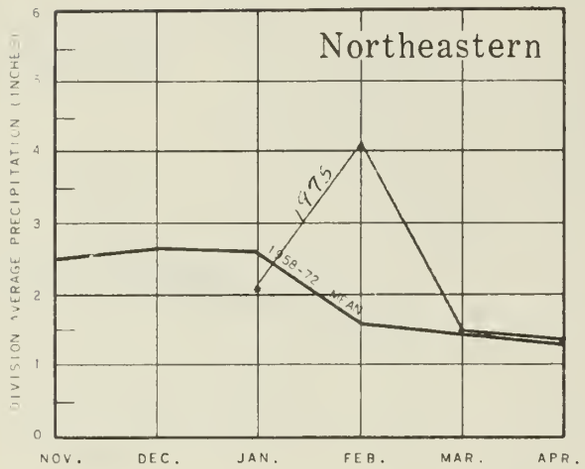


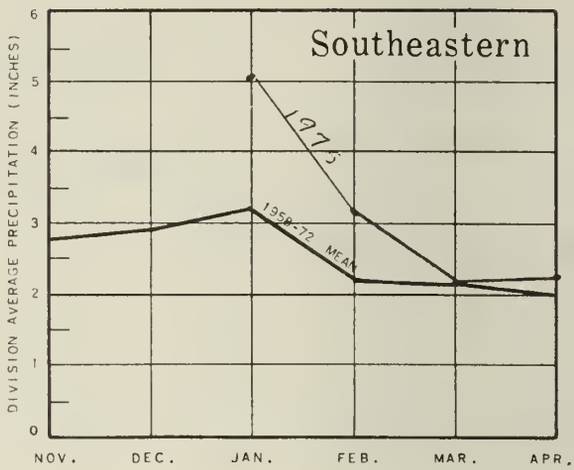
Selected Snow Survey Courses by Soil Conservation Service

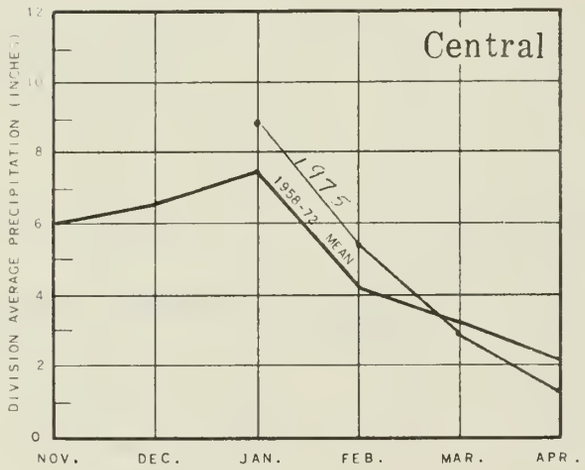
WASHINGTON VALLEY PRECIPITATION

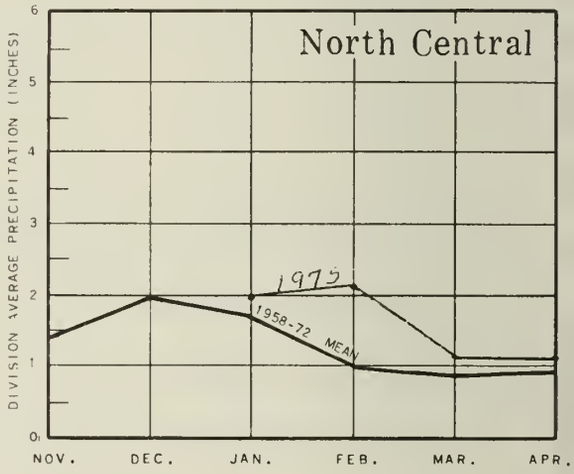
1975

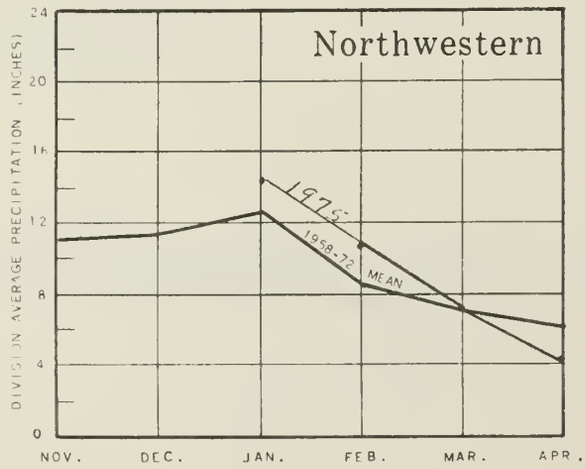
DRAINAGE AREAS

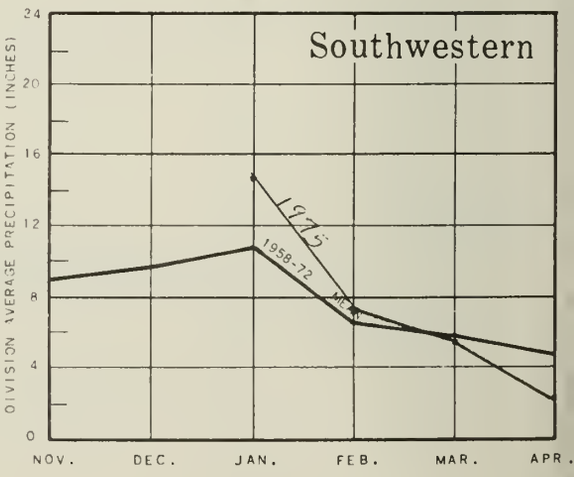








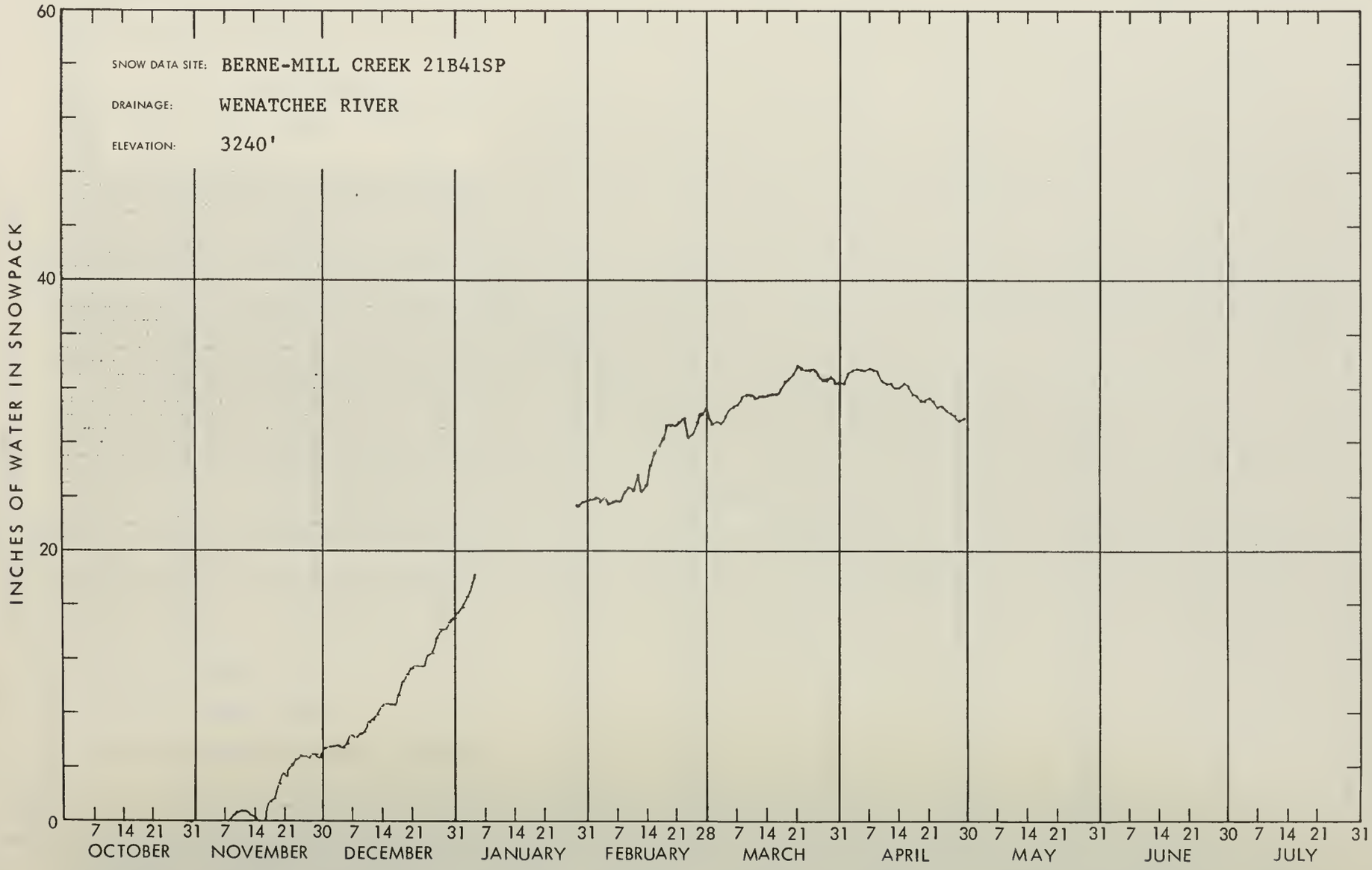




Preliminary Analysis by National Weather Service

USDA SCS PORTLAND OREG. 1976 M7-L-22028-1G

WSFB-X13C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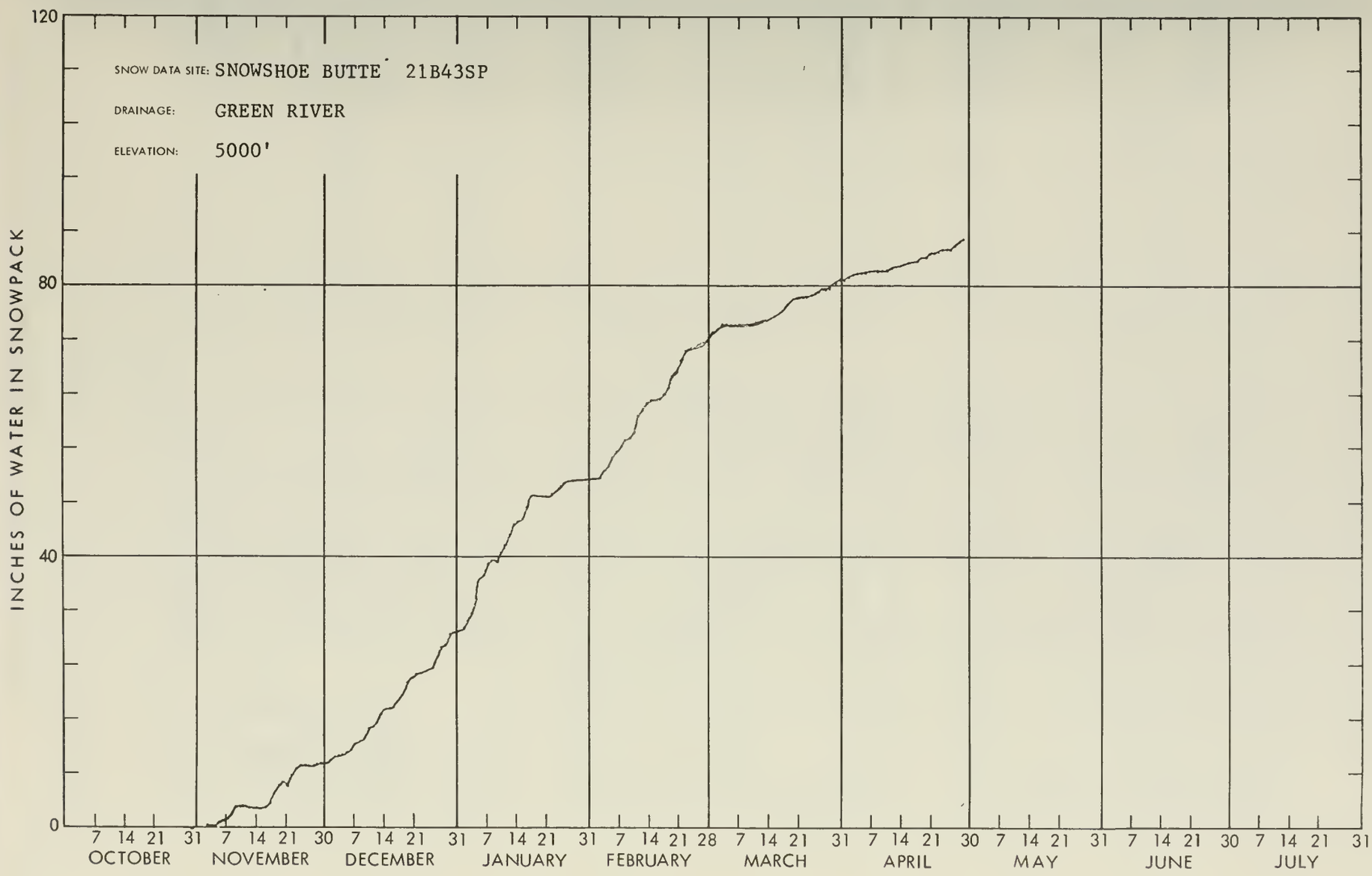
DRAINAGE: WENATCHEE RIVER
ELEVATION: 3240'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

WSFB-X13D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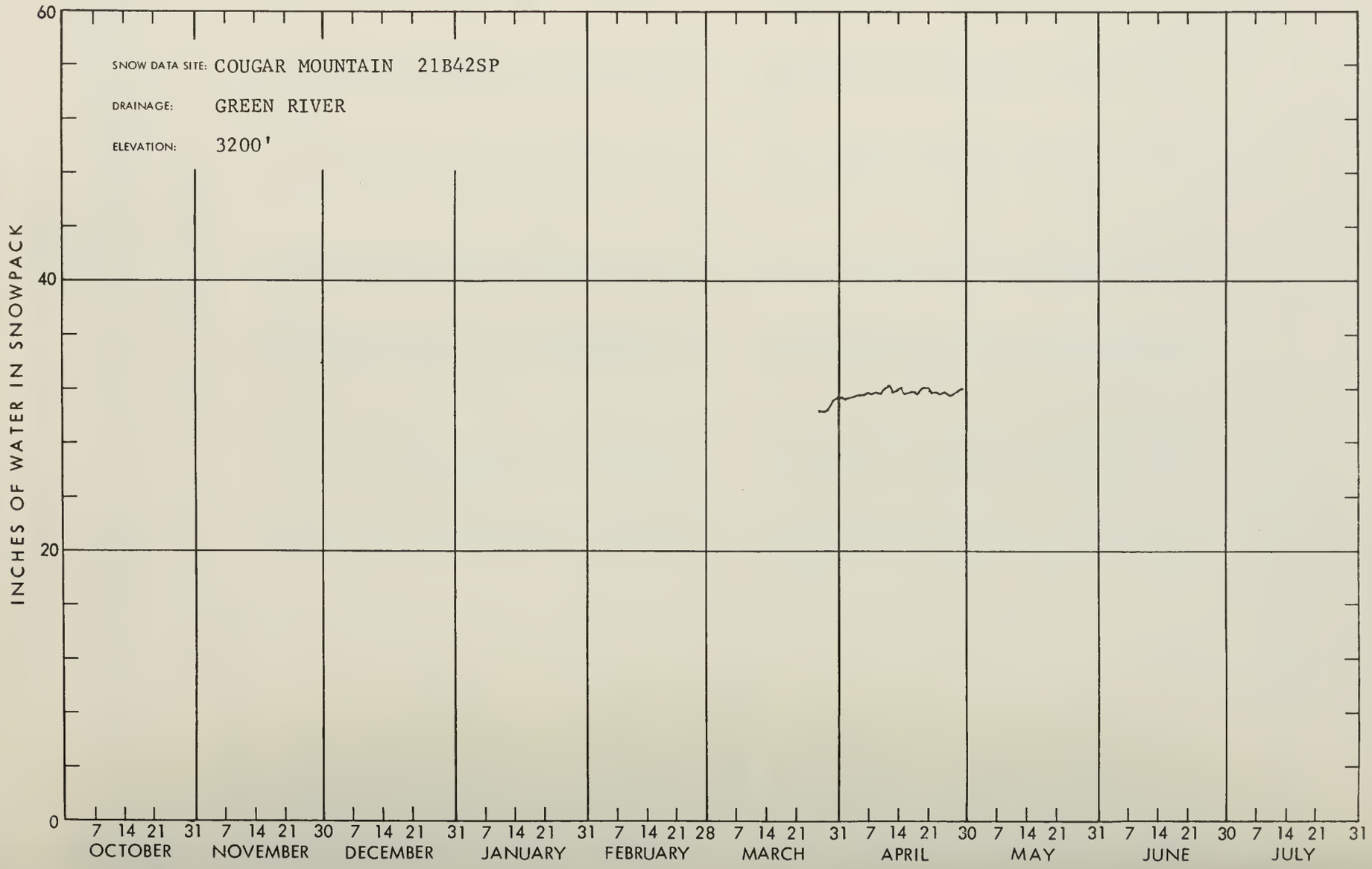
DRAINAGE: GREEN RIVER
ELEVATION: 5000'
INCHES OF WATER IN SNOWPACK
120
80
40
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

WSFB-X13C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DRAINAGE: GREEN RIVER
ELEVATION: 3200'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

SNOW DATA TO MAY 1, 1975 - APPENDIX 1

UPPER COLUMBIA DRAINAGE

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
PEND OREILLE RIVER							
Baree Creek	15B11	5500	4/29	130	61.4	74.3	49.6
Baree Midway	15B16	4600	4/29	105	47.8	50.9	35.1
Baree Trail	15B15	3800	4/30	24	10.3	1.6	1.2
Benton Meadow	16A02	2344	4/30	0	0.0	0.0	0.0
Benton Spring	16A03	4900	4/30	60	25.0	27.0	15.7
Boyer Mountain	17A02	5250	4/28	84	36.0	40.3	26.1
Brush Creek Timber	14A13	5000	4/29	32	11.9	9.6	8.2
Bunchgrass Meadow	17A01	5000	4/29	86	38.8	48.0	30.4
Heart Lake Trail	14C10	4800	5/2	69	30.2	26.4	19.0
Hoodoo Basin	15C10	6000	5/2	137	60.8	75.2	55.2
Hoodoo Creek	15C01	5900	5/2	128	57.6	72.2	52.2
Lookout	15B02	5250	4/15	Not Measured		56.8	-
			4/25	106	45.6	48.0	37.7
Nelson	19-Can	3050	4/28	37	15.6	11.7	7.0*
Schweitzer Bowl	16A06	4500	4/29	94	41.9	42.2	26.6
Schweitzer Ridge	16A05	6100	4/29	155	70.2	70.5	50.6
Smith Creek	16A01	4800	5/1	121	57.3	75.6	47.9
Winchester Creek	17A03	2970	4/28	23	9.5	0.0	1.6
KETTLE RIVER							
Barnes Creek	90-Can	5300	4/30	54	21.8	26.9	21.3*
Big White Mtn.	154-Can	5500	4/28	67	27.4	30.0	21.3*
Bluejoint Mtn.	244-Can	7500	4/26	99	39.4	46.7	New
Boulder Road	18A02	1450	4/28	0	0.0	0.0	0.0
Butte Creek	18A03	4070	4/28	29	10.9	10.1	5.9
Cabin Creek	18A08	3170	4/28	14	5.1	1.5	1.5
Carmi	126-Can	4100	4/28	16	5.1	2.5	1.9*
Farron # 1	17-Can	4000	4/29	36	13.6	16.0	8.2*
Farron # 2	243-Can	4000	4/29	36	14.4	16.0	New
Goat Creek	18A04	3595	4/28	0	0.0	0.0	0.0
Graystoke Lake	5-Can	5950	4/25	64	22.0	29.3	26.9*
Monashee Pass	48A-Can	4500	4/30	35	13.2	15.5	13.4*
Old Glory Mtn.	42-Can	7000	4/29	98	40.7	48.0	30.8*
Snow Caps Creek	18A05	2150	4/28	0	0.0	0.0	0.0
Snow Caps Trail	18A06	2720	4/28	0	0.0	0.0	0.0
Summit G. S.	18A07	4600	4/28	32	10.8	8.5	6.0
Trapping Creek Lower	166-Can	3050	4/28	0	0.0	0.0	0.0*
Trapping Creek Upper	165-Can	4450	4/28	30	12.4	9.9	6.1*

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
SPOKANE RIVER							
Above Burke	15B08	4100	4/25	76	33.6	28.8	-
Copper Ridge	16B02	4800	4/29	76	31.0	37.5	27.3
Forty-nine Meadows	15B03	5000	4/30	81	31.0	34.5	30.3
Fourth of July Summit	16B03	3100	4/25	14	5.5	0.0	-
Granite Peak	15B13A	6000	4/30	133	46.2	60.4	48.3
Lookout	15B02	5250	4/15	Not Measured		56.8	-
			4/25	106	45.6	48.0	37.7
Lost Lake	15B14A	6000	4/30	155	59.6	104.0	62.0
Lower Sands Creek	16B01	3400	4/29	54	23.0	27.1	16.0
Medicine Ridge	15B04A	6150	4/30	130	47.4	59.8	51.5
Mosquito Ridge	16A04A	5110	5/1	106	46.0	-	-
OKANOGAN RIVER							
Aberdeen Lake	6-Can	4300	5/1	16	5.5	2.0	1.7*
Blackwall Mountain	100-Can	6250	4/28	91	38.2	52.8	38.8*
Brenda Mine	193-Can	4800	4/28	34	14.0	15.5	10.8*
Brookmere	27-Can	3200	4/29	29	10.3	5.6	5.9*
Carrs Landing Upper	168-Can	3200	4/28	0	0.0	0.0	0.0*
Enderby	130-Can	6250	4/30	114	40.7	54.1	43.1*
Esperon Creek Lower	164-Can	4400	4/26	37	15.0	14.8	11.0*
Esperon Creek Middle	163-Can	4700	4/26	46	20.4	20.2	13.9*
Esperon Creek Upper	162-Can	5400	4/26	61	24.7	31.7	20.4*
Freezeout Meadows New	20A38	5000	4/28	102	44.0	79.2	-
Graystoke Lake	5-Can	5950	4/25	64	22.0	29.3	26.9*
Hamilton Hill	107-Can	4900	4/28	43	15.7	15.6	13.4*
Harts Pass	20A05A	6500	4/28	127	53.9	72.9	50.7
Isintok Lake	152-Can	5510	4/26	32	10.8	13.0	7.3*
Lost Horse Mountain	105-Can	6300	4/29	40	13.4	17.9	10.7*
Loup Loup	19A07	4650	4/28	24	9.0	9.2	-
McCulloch	4-Can	4200	4/27	19	6.2	3.8	2.8*
Missezula Mountain	106-Can	5100	4/27	33	11.3	12.7	4.5*
Mission Creek	5A-Can	6000	4/25	73	26.2	31.4	21.7*
Monashee Pass	48A-Can	4500	4/30	35	13.2	15.5	13.4*
Mount Kobau	156-Can	5950	5/1	45	15.7	23.5	13.7*
Mutton Creek No. 1	19A01	5700	4/29	41	16.1	28.3	10.9
Mutton Creek No. 2	19A04	6000	4/29	47	17.3	29.1	15.5
Mutton Creek No. 2 SP	19A11SP	6000	4/29	-	14.8	25.4	-
New Copper Mountain	46A-Can	4300	4/26	9	2.1	0.0	3.7*
New Penticton Res. # 2	183-Can	5225	4/30	39	10.5	12.5	- *
Nickel Plate Mtn.	47-Can	6200	4/29	34	11.6	13.7	7.9*
Oyama Lake	203-Can	4400	4/29	22	6.8	-	4.2*

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 3

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Postill Lake	55-Can	4500	4/30	25	10.2	9.6	6.8*
Quartette Lake	34-Can	4000	4/26	36	9.9	13.8	-
Rusty Creek	19A03	4000	4/30	11	4.3	5.0	0.6
Salmon Meadows	19A02	4500	4/29	24	9.3	13.1	5.4
Silver Star Mountain	99-Can	6050	4/28	84	36.7	44.7	27.4*
Summerland Reservoir	3A-Can	4200	4/27	33	12.9	10.0	6.7*
Trout Creek	3-Can	4700	4/29	30	10.7	8.6	5.2*
Vaseux Creek	233-Can	4600	4/26	18	5.4	2.8	2.9*
White Rocks Mountain	70-Can	6000	4/29	74	35.4	39.9	28.3*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	4/28	102	44.9	60.7	New
Brief	20B19	1600	4/27	0	0.0	0.0	0.0
Entiat Meadows +	20A33a	4800	4/28	104	45.8	69.9	41.0
Entiat River Trail +	20A34a	3150	4/28	24	10.1	15.8	9.7
Four Mile Ridge +	20B27a	7000	4/28	100	44.0	55.5	-
Fox Camp +	20A36a	6510	4/28	146	64.2	93.5	63.5
Pope Ridge	20B20	4300	4/28	44	18.5	20.0	8.2
Pugh Ridge +	20A32a	6400	4/28	95	41.8	61.2	38.7
Shady Pass	20A37	5000	4/28	83	36.1	46.6	-
Snow Brushy +	20A35a	3850	4/28	81	34.0	49.9	30.8
Tommy Creek +	20B21a	5300	4/28	51	22.4	36.0	22.5
METHOW RIVER							
Harts Pass	20A05A	6500	4/28	127	53.9	72.9	50.7
Loup Loup	19A07	4650	4/28	24	9.0	9.2	-
Mutton Creek No. 1	19A01	5700	4/29	41	16.1	28.3	10.9
Mutton Creek No. 2	19A04	6000	4/29	47	17.3	29.1	15.6
Mutton Creek No. 2 SP	19A11SP	6000	4/29	-	14.8	25.4	-
Rusty Creek	19A03	4000	4/30	11	4.3	5.0	0.6
Salmon Meadows	19A02	4500	4/29	24	9.3	13.1	5.4
CHELAN LAKE BASIN							
Rainy Pass	20A09	4780	4/27	110	49.8	60.6	44.3
WENATCHEE RIVER							
Berne-Mill Creek	21B23	2925	4/29	76	39.3	39.8	21.1
Berne-Mill Creek New SP	21B41SP	3240	4/29	62	31.4	31.6	17.7
Blewett Pass No. 2	20B02	4270	4/14	46	20.2	23.8	13.0
			4/24	43	19.5	17.5	9.5

average based on 1958-72 average
* average for years of record
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 4

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER (Cont.)							
Chiwaukum G. S.	20B16	1810	4/29	0	0.0	0.0	1.8
Fish Lake	21B04	3371	4/28	80	37.0	47.9	26.7
Lake Wenatchee	20B05	1970	4/29	12	5.4	3.1	1.6
Leavenworth R. S.	20B17	1127	4/25	0	0.0	-	0.0
Merritt	20B18	2140	4/29	35	15.6	8.3	3.8
Stevens Pass	21B01	4070	4/15	150	67.6	83.2	55.2
			4/29	146	69.2	82.6	55.8
Stevens Pass Sand Shed	21B45	3700	4/15	105	48.9	63.4	-
			4/29	101	48.7	59.6	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	4/30	14	5.4	3.9	1.7
Scout-A-Vista	20B04	3400	4/30	1.2	0.5	0.0	0.4
STEMILT CREEK							
Jump-Off	20B08	4450	4/28	21	8.2	4.6	2.8
Stemilt Slide	20B06	5000	4/28	33	14.7	14.9	7.1
Upper Wheeler	20B07	4400	4/28	16	7.3	0.0	1.0
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	4/28	38	17.5	15.3	-
Colockum Creek Lower	20B23	4300	4/28	19	8.5	3.0	-
YAKIMA RIVER							
Big Boulder Creek	21B09	3200	4/28	47	20.9	28.1	7.4
Blewett Pass No. 2	20B02	4270	4/14	46	20.2	23.8	13.0
			4/24	43	19.5	17.5	9.5
Bumping Lake	21C08	3450	4/14	51	20.4	28.2	13.4
			4/30	39	14.8	19.9	9.4
Bumping Lake New	21C36	3400	4/14	66	26.4	34.2	-
			4/30	49	21.5	26.6	15.0
Cayuse Pass	21C06	5300	4/29	234	105.4	138.1	-
Corral Pass	21C13	6000	4/29	136	58.4	-	-
Fish Lake	21B04	3371	4/28	80	37.0	47.9	26.7
Joe Lake +	21B46a	4624	4/29	216	99.4	-	-
Lake Cle Elum	21B14M	2200	4/15	19	8.0	0.0	-
			4/30	0	0.0	0.0	0.0

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
YAKIMA RIVER (Cont.)							
Lemah Creek +	21B47a	3327	4/29	100	46.0	65.0	-
Morse Lake	21C17	5400	4/29	162	88.1	-	65.1
Olallie Meadows	21B02	3625	4/15	138	64.8	91.3	48.4
			4/29	145	66.5	91.8	48.6
Satus Pass	20D01	4030	4/29	29	12.8	7.8	1.9
Stampede Pass SP	21B10	3860	4/15	-	53.8	65.7	43.4
			5/1	-	55.0	62.1	43.4
Tunnel Avenue	21B08	2450	4/14	79	33.0	34.3	20.1
			4/30	65	29.0	27.0	16.0
Van Epps Pass +	20B26a	5925	4/29	137	63.0	75.0	-
Waptus Lake +	21B49a	3024	4/29	91	41.9	50.0	-
White Pass (E. Side)	21C28	4500	4/15	89	34.0	45.4	26.0
			5/1	82	33.6	45.3	25.9
White Pass (L. Lake)	21C27	4500	4/29	90	39.3	49.5	28.6
LOWER COLUMBIA DRAINAGE							
ASOTIN CREEK							
Spruce Springs	17C04	5700	4/30	78	33.3	43.7	25.8
MILL CREEK							
Tollgate	18D3M	5070	5/1	Not Measured		52.9	18.9
KLICKITAT RIVER							
Satus Pass	20D01	4030	4/29	29	12.8	7.8	1.9
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	4/28	122	51.3	79.7	48.9
Surprise Lakes	21C13A	4250	4/28	136	59.7	92.5	52.9
WIND RIVER							
Old Man Pass	21D19	3100	4/28	44	18.6	27.0	12.6

Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
LEWIS RIVER							
Blue Lake +	21C22a	4800	4/28	244	104.9	146.0	92.4
Bob-s Trail	21C21	2200	4/26	29	12.1	18.0	7.8
Calamity Ridge +	22D01a	2500	4/28	8	3.5	0.0	1.3
Council Pass +	21C18a	4200	4/28	116	51.0	68.0	38.8
Cultus Creek	21C12	4000	4/28	122	51.3	79.7	48.9
Divide Meadow +	21C29a	5600	4/28	164	70.5	96.0	65.5
Grand Meadow	21C25	3500	4/26	67	30.6	40.2	22.4
Lone Pine Shelter	21C26	3800	4/29	119	48.9	81.0	46.3
Marble Mountain +	22C05a	3200	4/28	74	35.5	72.6	33.2
Mosquito Meadows	21C19	4100	4/29	115	49.4	72.9	45.8
New Muddy River	22C06	1400	4/26	0	0.0	0.0	0.8
Old Man Pass	21D19	3100	4/28	44	18.6	27.0	12.6
Plains Of Abraham +	22C01a	4400	4/26	182	80.1	120.4	76.9
Smith Creek Road	22C04	2100	4/26	15	7.4	6.1	5.3
Spencer Meadow +	21C20a	3400	4/26	51	23.5	43.2	16.1
Surprise Lakes	21C13A	4250	4/28	136	59.7	92.5	52.9
Table Mountain +	21C24a	4200	4/28	134	59.0	82.0	40.3
Timbered Peak +	21D18a	3000	4/28	36	15.8	25.0	9.9
COWLITZ RIVER							
Cayuse Pass	21C06	5300	4/29	234	105.4	138.1	-
Mosquito Meadows	21C19	4100	4/29	115	49.4	72.9	45.8
Plains of Abraham +	22C01a	4400	4/26	182	80.1	120.4	76.9
Potato Hill	21C14	4500	4/29	98	42.4	53.7	-
White Pass (E. Side)	21C28	4500	4/15	88	34.0	45.4	26.0
			5/1	80	33.6	45.3	25.9
White Pass (L. Lake)	21C27	4500	4/29	90	39.3	49.5	28.6
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	4/24	125	61.1	80.7	-
Longmire	21C03	2760	4/24	17	7.6	10.8	-
New Paradise Park	21C35	5500	4/24	209	93.0	127.8	-
Stem Glade	21C01	5050	4/24	195	84.4	110.0	-
WHITE RIVER							
Cayuse Pass	21C06	5300	4/29	234	105.4	138.1	-
Corral Pass	21C13	6000	4/29	136	58.4	-	-
Morse Lake	21C17	5400	4/29	162	88.1	-	65.1

Average based on 1958-72 average

+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #/
GREEN RIVER							
Cougar Mountain SP	21B42SP	3200	4/29	65	30.7	26.0	-
Snowshoe Butte SP	21B43SP	5000	4/15	Not Measured		89.2	-
			4/29	180	76.5	100.0	-
Stampede Pass SP	21B10	3860	4/15	-	53.8	65.7	43.4
			5/1	-	55.0	62.1	43.4
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	4/15	138	64.8	91.3	48.4
			4/29	145	66.5	91.6	48.6
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	4/15	150	67.6	83.2	55.2
			4/29	146	69.2	82.6	55.8
Stevens Pass Sand Shed	21B45	3700	4/15	105	48.9	63.4	-
			4/29	101	48.7	59.6	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	4/28	32	13.2	7.3	4.8
Beaver Pass	21A01	3680	4/28	80	35.0	50.3	34.0
Brown Top	21A28a	6000	4/28	161	71.2	98.0	-
Cloudy Pass	20A22a	6500	5/1	Not Measured		-	-
Devils Park	20A04	5900	4/27	126	55.1	67.6	49.5
Freezeout Cr. Trail	20A01	3500	4/27	33	12.9	15.8	8.2
Freezeout Meadows New	20A38	5000	4/28	102	44.0	79.2	31.0
Granite Creek	21A29	3500	4/27	45	19.0	20.8	-
Harts Pass	20A05A	6500	4/28	127	53.9	72.9	50.7
Klesilkwa	35B-Can	3700	5/1	Not Measured		16.9	11.3*
Meadow Cabins	20A08	1900	4/27	9	3.8	0.0	1.3
New Hozomeen Lake	21A30	2800	4/28	31	10.6	11.5	-
New Tashme	26A-Can	2500	4/29	24	10.5	1.1	5.6*
Quartette Lake	34-Can	4000	4/26	36	9.9	13.8	- *
Rainy Pass	20A09	4780	4/27	110	49.8	60.6	44.3
Thunder Basin	20A07	4200	4/27	97	42.1	33.9	25.5
BAKER RIVER							
Baker Pass +	21A27a	4900	4/13	218	98.0	133.0	-
			4/29	222	99.9	135.0	-
Dock Butte	21A11A	3800	4/13	174	78.0	106.0	64.0
			4/29	172	78.8	106.8	77.4

#/ Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1975 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER (Cont.)							
Easy Pass	21A07A	5200	4/13	204	92.0	117.0	86.7
			4/29	224	101.0	126.3	93.3
Jasper Pass	21A06A	5400	4/13	228	102.0	133.0	91.1
			4/29	232	104.2	134.2	102.7
Komo Kulshan	21A17	800	4/29	0	0.0	0.0	0.7
Marten Lake	21A09A	3600	4/13	194	87.0	129.0	80.4
			4/29	194	86.5	122.3	83.8
Mount Blum +	21A18a	5800	4/13	178	80.0	95.0	-
			4/29	180	81.0	97.0	-
Panorama New	21A26	4300	4/14	180	82.7	114.7	-
			4/28	189	83.7	146.1	-
Rocky Creek	21A12A	2100	4/13	96	43.0	48.0	25.5
			4/30	81	37.6	37.4	22.6
Schreibers Meadow	21A10A	3400	4/13	145	65.0	97.0	63.0
			4/29	158	73.8	100.4	67.5
S. F. Thunder Creek	21A14A	2200	4/13	35	16.0	10.0	1.7
			4/30	13	5.7	0.0	1.1
Sulphur Creek	21A13	1600	4/30	32	14.1	7.0	6.4
Three Mile Creek	21A15	4500	4/30	0	0.0	0.0	0.0
Watson Lakes	21A08A	4500	4/13	170	76.0	95.0	72.9
			4/29	181	77.2	98.8	76.9
NOOKSACK RIVER							
Panorama New	21A26	4300	4/14	180	82.7	114.7	-
			4/28	189	83.7	146.1	-
OLYMPIC PENINSULA							
MORSE CREEK							
Cox Valley	23B14	4500	4/28	102	45.1	55.4	-
ELWHA RIVER							
Hurricane	23B03	4500	4/27	71	28.1	31.1	26.9
SKOKOMISH RIVER							
Black & White	23B07	4200	4/27	128	53.2	68.2	-
Black & White Lakes	23B06	4700	4/27	160	72.6	101.6	-
Home Sweet Home	23B05	5200	4/27	194	80.8	126.2	-

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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COOPERATIVE SNOW SURVEYS

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"The Conservation of Water begins with the Snow Survey"

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WATER SUPPLY OUTLOOK FOR WASHINGTON

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF
JUNE 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO 1'-P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS-PORTLAND, OREG. 1974

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201

WATER SUPPLY OUTLOOK

State of Washington

June 1, 1975

Mother Nature has been favorable to the water supply outlook for the state of Washington. The few snow courses that are measured in the state continue to indicate well above normal snow packs, but not as great as was measured last year at this time. Rainfall was below normal throughout most of the state, with the exception of the central area, during the month and accumulated spring rainfall was below normal except in the north central area. Temperatures have been cool this past month which has markedly reduced runoff from most watersheds. Only those watersheds with most of their drainage in the lower elevation zones produced above normal runoff during the month. An additional plus to this cool weather will be the reduction of the forecasted flood stages. Above normal water will be extended thru June and July, but the stages should not be as great as previously anticipated. June 1 reservoir storages mean very little, as most are being controlled for flood control purposes.

SNOW COVER

Only a few high elevation snow courses are measured on June 1 in the state of Washington, but many more are measured in the tributary basins in British Columbia, Montana and Idaho. All snow courses indicate less water than was measured last year, well above that which was measured in 1973 and generally above average. As always, there are a few exceptions. Comparison of snow courses, as we have done in the past several months, is not a good indicator this late in the season. It would work out for those snow courses at the very high elevations, but at the mid and lower elevations the snow pack fluctuates too greatly around zero and is not indicative of current conditions.

RESERVOIRS

All reservoirs are being managed for flood control purposes. Some with limited outflow, such as Coeur d'Alene Lake, have well above normal amounts of water in storage and even well above capacity. Pure irrigation reservoirs, such as Banks, Salmon and Conconully Reservoirs, have above normal amounts of water in storage and are full or nearly so. Power reservoirs, such as Franklin D. Roosevelt and Lake Chelan, are low but will fill with the spring runoff. The five Yakima Reservoirs have been drafted during these past months, but are now going on storage and will fill by June 15th or 20th.

STREAMFLOW

The streams that were reported to have above normal outflow during May are the ones draining the lower elevations, such as Spokane, Klickitat, Palouse, Walla Walla, Chehalis and Green. Other streams were reported to have less than normal outflows and the Columbia, flowing from the north, had an outflow that was 79 percent of normal at Birchbank, but increased to 97 percent at The Dalles.

PRECIPITATION

Rainfall was generally below normal with only north central and central Washington reporting above average precipitation. The northwest slopes of the Cascades had normal rainfall, while the rest of Washington varied from 14 percent below normal to 5 percent below. In Canada, the Columbia Drainage precipitation was 29 percent below average. These are preliminary figures, as released by the National Weather Service.

RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured June 1, 1975 1975	1974	1973	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	326.8	397.7	218.9	299.8
Columbia	Franklin D. Roosevelt Lake	5232.0	600.2	979.0	1808.5	3239.1
Columbia	Banks Lake	761.8	507.5	204.9	112.2	446.7
Okanogan	Conconully Reservoir	13.0	12.1	11.5	10.4	10.4
Okanogan	Salmon Lake	10.5	10.5	10.5	10.1	9.3
Chelan	Lake Chelan	676.1	339.5	390.0	436.7	481.4
		YAKIMA				
Yakima	Keechelus Lake	157.8	129.4	114.1	122.9	147.5
Kachess	Kachess Lake	239.0	191.9	196.8	173.1	226.2
Cle Elum	Lake Cle Elum	436.9	336.4	301.5	337.2	387.3
Bumping	Bumping Lake	33.7	16.9	16.6	27.8	27.7
Tieton	Rimrock Lake	198.0	142.7	148.4	131.8	172.0
		PUGET SOUND				
Skagit	Ross Reservoir	1404.1	736.8	808.8	1056.3	708.6
Skagit	Diablo Reservoir	90.6	88.8	86.8	87.9	84.8
Skagit	Gorge Reservoir	9.8	9.0	8.9	8.1	-

1/ Based on Active Storage

* 15-year Average 1958-72

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct 1974 2/ Observed	Departure	WINTER Nov.-1974--Mar.-1975 Observed	Departure	SPRING April-May 1975 2/ Observed	Departure
Columbia in Canada	1.22	- 3.25	13.42	+ 0.67	1.75	- 1.48
Pend Oreille - Spokane	0.71	- 3.77	21.69	+ 2.99	3.91	- 0.50
Northeastern Washington	0.30	- 2.48	14.78	+ 3.67	2.95	- 0.31
Southeastern Washington	0.31	- 2.92	15.27	+ 1.80	3.14	- 0.52
Central Washington	1.21	- 3.54	31.75	+ 4.22	2.61	- 0.70
North Central Washington	0.37	- 1.25	7.93	+ 1.21	2.50	+ 0.61
Northwest Slope Cascades	3.25	- 9.44	59.41	+ 7.18	8.19	- 1.93
Southwest Slope Cascades	2.49	- 6.19	44.71	+ 3.07	5.28	- 2.02

Northeastern Washington - Lower Spokane, Colville, Sanpoil and Lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

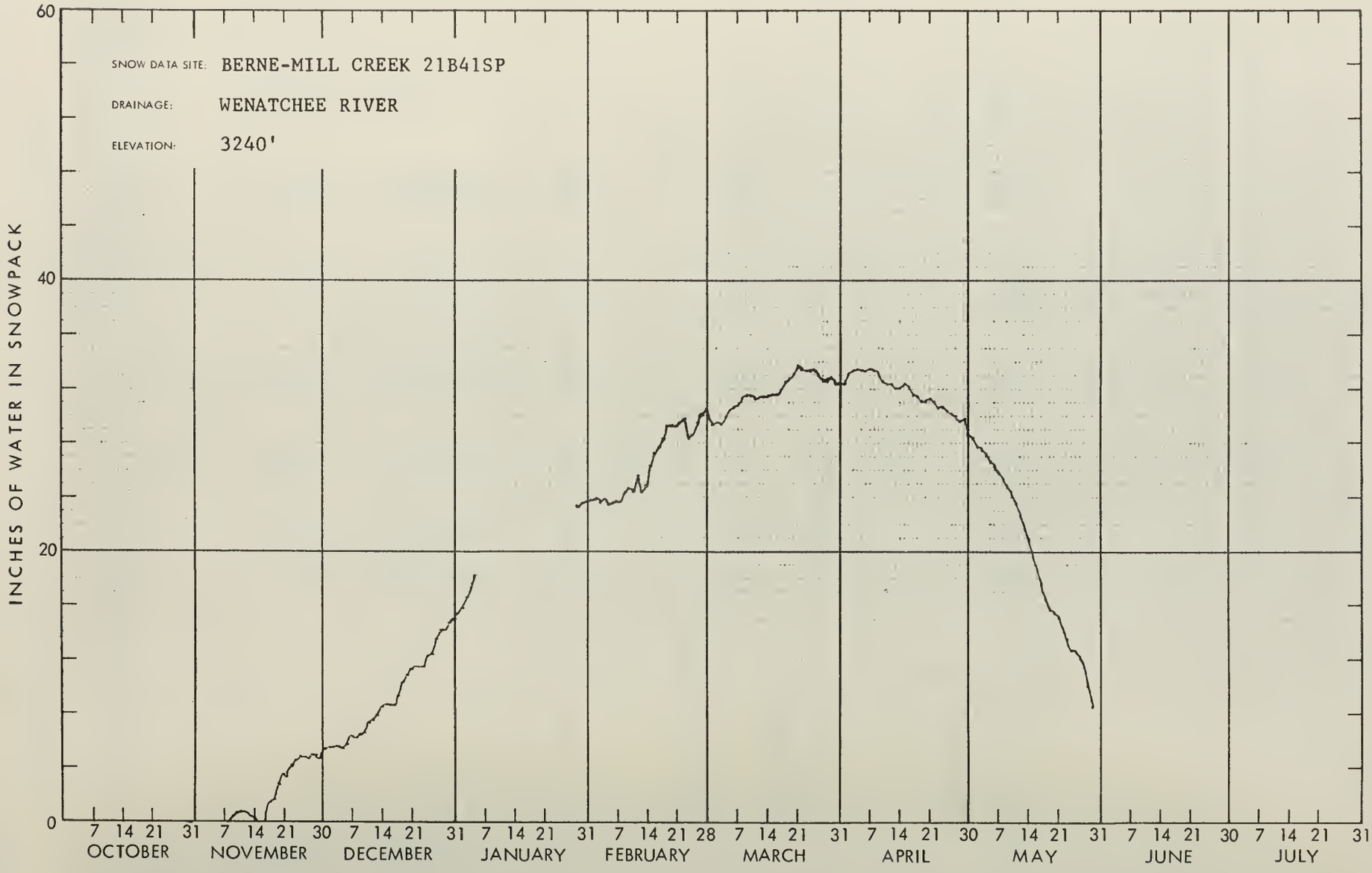
Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

2/ - Departure from 15-year (1958-72) drainage division average.

WSFB-X13C


SNOW DATA SITE: BERNE-MILL CREEK 21B41SP
DRAINAGE: WENATCHEE RIVER
ELEVATION: 3240'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

CORRECTIONS AND ADDITIONS - 1975 SNOW REPORTS - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
February 1							
COWLITZ RIVER							
Pigtail Peak	21C33	5900	1/28	135	49.5	60.5	46.7
Potato Hill	21C14	4500	1/28	78	26.3	34.6	23.7
GREEN RIVER							
Cougar Mountain SP	21B42SP	3200	1/3	34	8.4	15.2	-
Lester Creek	21B29	3100	11/25	12	3.2	9.1	3.4
Lynn Lake	21B50	4000	11/25	0.8	0.3	10.4	-
Snowshoe Butte SP	21B43SP	5000	12/18	54	22.6	-	-
SKOKOMISH RIVER							
Home Sweet Home	23B05	5200	1/27	118	45.2	69.0	56.5
April 1							
PEND OREILLE RIVER							
Lookout	15B02	5250	3/14	100	36.5	48.2	35.6
BAKER RIVER							
Schreibers Meadow +	21A10A	3400	3/29	176	71.4	104.2	65.6
May 1							
BAKER RIVER							
Dock Butte +	21A11A	3800	4/29	176	78.8	106.8	77.4
Schreibers Meadow +	21A10A	3400	4/29	160	73.8	100.4	67.5

Average based on 1958-72 average
+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

WSFB-X4-L

SNOW DATA TO JUNE 1, 1975 - APPENDIX 2

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	5/15	104	55.6	65.4	42.6
Baree Midway	15B16	4600	5/16	73	38.4	43.2	24.5
Baree Trail	15B15	3800	5/16	0	0.0	0.0	0.0
Heart Lake Trail	14C10	4800	5/15	50	23.1	24.6	10.2
			5/30	30	14.4	11.9	1.7
Hoodoo Basin	15C10	6000	5/15	119	57.6	76.2	48.8
			5/30	101	51.2	62.6	34.9
Hoodoo Creek	15C01	5900	5/15	112	54.8	72.3	45.5
			5/30	95	47.6	63.6	33.5
Lookout	15B02	5250	5/15	80	41.0	-	30.9
			5/30	54	28.8	34.2	-
Nelson	19-Can	3050	5/13	12	5.2	2.9	0.8*
			5/29	0	0.0	0.0	0.0*
KETTLE RIVER							
Big White Mtn.	154-Can	5500	5/14	50	24.2	28.8	17.8 *
			5/29	34	18.4	25.9	8.8 *
Carmi	126-Can	4100	5/14	0	0.0	0.0	0.0 *
Farron # 1	17-Can	4000	5/15	14	5.4	6.5	- *
Farron # 2	243-Can	4000	5/15	16	6.8	-	- *
Graystoke Lake	5-Can	5950	5/14	45	19.1	29.2	21.1 *
Monashee Pass	48A-Can	4500	5/14	19	8.9	12.1	9.4 *
			6/1	3	1.5	7.5	2.0 *
Old Glory Mtn.	42-Can	7000	5/11	88	39.2	48.1	29.1 *
			5/30	60	30.8	46.1	17.3 *
Trapping Creek Upper	165-Can	4450	5/14	0	0.0	1.4	0.5 *
SPOKANE RIVER							
Granite Peak	15B13A	6000	5/29	99	42.1	45.0	-
Lookout	15B02	5250	5/15	80	41.0	-	30.9
			5/30	54	28.8	34.2	-
Lost Lake	15B14A	6000	5/29	125	58.2	83.6	-
Medicine Ridge	15B04A	6150	5/29	100	43.4	52.6	-
OKANOGAN RIVER							
Blackwall Peak	100-Can	6250	5/13	79	37.1	51.2	37.6 *
			6/2	50	26.5	49.2	29.1 *
Brenda Mine	193-Can	4800	5/14	7	3.1	5.1	2.9 *
			5/26	0	0.0	0.0	0.0 *

Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO JUNE 1, 1975 - APPENDIX 3

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
OKANOGAN RIVER (Cont.)							
Brookmere	27-Can	3200	5/15	13	5.0	0.6	2.9 *
Enderby	130-Can	6250	5/14	98	43.3	59.0	45.2 *
			5/30	91	42.1	56.0	40.0 *
Esperon Creek Lower	164-Can	4400	5/14	13	5.6	7.5	2.5 *
			5/31	0	0.0	2.4	0.0 *
Esperon Creek Middle	163-Can	4700	5/14	23	11.1	13.2	4.9 *
			5/31	0	0.0	5.0	0.0 *
Esperon Creek Upper	162-Can	5400	5/14	44	22.2	24.6	9.8 *
			5/31	27	14.0	19.3	5.9 *
Graystoke Lake	5-Can	5950	5/14	45	19.1	29.2	21.1 *
Hamilton Hill	107-Can	4900	5/13	23	10.3	10.7	6.5 *
Isintok Lake	152-Can	5510	5/11	21	7.8	10.2	4.8 *
			5/29	4	1.5	7.0	- *
Lost Horse Mountain	105-Can	6300	5/16	27	9.6	15.6	10.3 *
			5/30	16	6.5	-	4.2 *
McCulloch	4-Can	4200	5/14	0	0.0	0.2	0.6 *
Missezula Mountain	106-Can	5100	5/14	16	6.4	7.2	1.9 *
Mission Creek	5A-Can	6000	5/14	51	21.3	30.9	19.1 *
			5/29	41	20.0	29.4	11.4 *
Monashee Pass	48A-Can	4500	5/14	19	8.9	12.1	9.4 *
			6/1	3	1.5	7.5	2.0 *
Mount Kobau	156-Can	5950	5/14	38	14.1	20.2	10.0 *
			5/30	21	8.3	19.2	2.0 *
New Penticton Res. # 2	183-Can	5225	5/15	24	8.5	10.0	7.3 *
			5/31	4	1.4	6.1	- *
Silver Star Mountain	99-Can	6050	5/12	65	32.6	41.5	26.0 *
			6/1	44	25.6	38.6	15.5 *
Summerland Reservoir	3A-Can	4200	5/11	18	8.1	3.0	2.3 *
			5/27	2	1.0	0.0	- *
Trout Creek	3-Can	4700	5/12	14	5.4	4.4	1.7 *
Vaseux Creek	233-Can	4600	5/14	0	0.0	0.8	0.5 *
White Rocks Mountain	70-Can	6000	5/15	54	26.3	38.1	20.8 *
			6/2	41	21.2	33.4	- *
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	5/29	77	41.6	46.6	-
Entiat Meadows +	20A33a	4800	5/29	68	36.7	46.6	-
Entiat River Trail +	20A34a	3150	5/29	0	0.0	-	-
Four Mile Ridge +	20B27a	7000	5/29	65	35.1	44.4	-
Fox Camp +	20A36a	6510	5/29	142	76.7	84.4	-
Pope Ridge	20B20	4300	5/29	0	0.0	-	-
Pugh Ridge +	20A32a	6400	5/29	61	32.9	51.6	-
Shady Pass	20A37	5000	5/29	36	19.6	32.7	-
Snow Brushy +	20A35a	3850	5/29	45	24.3	25.0	-
Tommy Creek +	20B21a	5300	5/29	12	6.5	15.5	-

Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation.

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO JUNE 1, 1975 - APPENDIX 4

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
CHELAN LAKE BASIN							
Little Meadows +	20A24a	5275	5/15	110	52.8	-	-
Lyman Lake	20A23A	5900	5/15	150	72.0	-	-
Park Creek Ridge	20A12A	4600	5/15	97	46.6	-	-
WENATCHEE RIVER							
Stevens Pass	21B01	4070	5/15	121	56.7	77.2	48.3
			5/29	108	59.4	70.1	36.5
Stevens Pass Sand Shed	21B45	3700	5/15	71	34.1	53.4	-
			5/29	55	30.2	40.8	-
YAKIMA RIVER							
Bumping Lake	21C08	3450	5/15	11	5.0	9.8	1.8
			5/30	0	0.0	0.0	-
Bumping Lake New	21C36	3400	5/15	23	11.1	17.6	-
			5/30	0	0.0	0.0	-
Stampede Pass SP	21B10	3860	5/14	-	47.1	68.6	33.6
			6/2	-	41.2	70.4	18.8
Tunnel Avenue	21B08	2450	5/15	42	19.2	17.9	7.9
			5/30	13	6.3	5.6	-
White Pass (E. Side)	21C28	4500	5/15	65	31.7	38.1	21.2
			5/30	44	21.6	34.6	13.6
LOWER COLUMBIA DRAINAGE							
COWLITZ RIVER							
White Pass (E. Side)	21C28	4500	5/15	65	31.7	38.1	21.2
			5/30	44	21.6	34.6	13.6
PUGET SOUND DRAINAGE							
GREEN RIVER							
Stampede Pass SP	21B10	3860	5/14	-	47.1	68.6	33.6
			6/2	-	41.2	70.4	18.8
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	5/15	121	56.7	77.2	48.3
			5/29	108	59.4	70.1	36.5
Stevens Pass Sand Shed	21B45	3700	5/15	71	34.1	53.4	-
			5/29	55	30.2	40.8	-

Average based on 1958-72 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO JUNE 1, 1975 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
BAKER RIVER							
Baker Pass +	21A27a	4900	5/13	204	102.0	159.0	-
			5/27	186	102.0	-	-
Dock Butte	21A11A	3800	5/13	145	73.0	110.0	72.7
			5/27	134	74.0	-	58.0
Easy Pass	21A07A	5200	5/13	188	94.0	141.0	90.2
			5/27	170	93.0	-	73.6
Jasper Pass	21A06A	5400	5/13	206	103.0	155.0	114.7
			5/27	210	115.0	-	84.2
Marten Lake	21A09A	3600	5/13	168	84.0	132.0	81.3
			5/27	152	84.0	-	66.2
Mount Blum +	21A18a	5800	5/13	172	86.0	116.0	-
			5/27	169	93.0	-	-
Rocky Creek	21A12A	2100	5/13	53	27.0	31.0	12.1
			5/27	10	5.0	-	-
Schreibers Meadow	21A10A	3400	5/13	110	55.0	97.0	61.7
			5/27	112	62.0	-	48.6
S. F. Thunder Creek	21A14A	2200	5/13	Not Measured		0.0	0.0
			5/27	0	0.0	-	-
Watson Lakes	21A08A	4500	5/13	120	60.0	108.0	73.5
			5/27	144	79.0	-	61.4

Average based on 1958-72 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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